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AUTHOR	Lee, Gus C.; And Others
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ABSTRACT

The number of schools and students tested in the Department of Defense (DoD) High School Testing Program has declined since the program reached its peak in the school year 1974-75. Telephone interviews with school counselors indicated that the decline was due to school-related difficulties of test administration, lack of student interest, and the lack of usefulness of the test for civilian counseling. The major purpose of the program is to assist military recruiting operations by furnishing a list of contacts, prospects and leads. A secondary purpose is to provide the school with a test that is useful for civilian as well as military career counseling. The use of commercial tests to supplement the Armed Services Vocational Aptitude Battery (ASVAB) may result in more leads to recruiters than can be furnished by the ASVAB program alone. The commercial tests identified as suitable for use are the Career Planning Program of the American College Testing Program, the Differential Aptitude Test of the Psychological Corporation, and the American College Testing Assessment Program. A large-scale pilot test is planned for 1982 to determine the cost-effectiveness of the commercial tests and the impact on the number of schools that administer the ASVAB and the number of students who participate. (Author/PN)

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Dr. Mark J. Eitelberg	Chapter 2
Dr. Richard J. Orend	Chapter 3
Dr. Eli S. Flyer	Chapter 4

The views are those of the authors and not necessarily those of the Department of Defense.

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EXECUTIVE SUMMARY

The DoD High School Testing Program has existed in one form or another for over twenty years. Under the program the Armed Services Vocational Aptitude Battery (ASVAB) is administered free of charge in a large number of high schools. Information about seniors and juniors, including their test scores, is furnished to recruiters, as well as to the high schools for their use in guidance and counseling. The test is offered to the high schools free of charge. The test serves both a military purpose in that it is used as a military test for entry into service and a civilian purpose in that it is used for civilian counseling.

From its inauguration by the Air Force in 1958 the program grew from year to year in both the number of schools and number of students tested, reaching its peak in the school year 1974-75 when 1,297,000 students were tested in 15,849 high schools. Since the peak year, the program has declined each year in the number of students tested, except in school year 1980-81; also, since the peak year, the program has declined in four of the six years in the number of schools tested. During the 1980-81 school year about 921,000 students were tested in 13,542 schools. This is a decline of about 29 percent in the number of students and a decline of about 14.5 percent in the number of schools since the peak 1974-1975 school year.

The 1980-81 program tested 8.14 percent of the available students in 69 percent of the available schools. This may be compared to about 10 percent of the available students in 74 percent of the available schools tested in the 1977-78 program.1/

The decrease in the number of students tested from the end of the 1976-77 school year to the end of the 1980-81 school year was 173,278 students. About two-thirds of this decline consisted of test takers who were freshmen and sophomores and about one-third of test takers who were seniors. The number of juniors tested actually increased by 35,190 during this time period. The Joint Recruiting Commanders made a policy decision that in part explains the decline in the number of freshmen and sophomores who took the test since 1976-77; freshmen and sophomores were included in the testing goals issued to the individual IRC's-AFEES in 1976-77 but in subsequent years the testing goals included juniors and seniors but excluded freshmen and sophomores.

The relatively wide usage of the ASVAB in spite of the decline in participation is consistent with the results of an earlier survey in 1978 when counselors and school officials were asked to rate the ASVAB program. About 50 percent of the counselors and 40 percent of the school officials rated the program as "above average" and 32 percent of the counselors and 45 percent of the school officials rated it as "average." In spite of criticism of the ASVAB as an instrument for use in civilian counseling, ASVAB is a "trade name" that is favorably regarded in a majority of high schools.

1/"Availables" are those reported by the Interservice Recruitment Committees as students in schools that are productive for testing from a recruiting standpoint; schools for the handicapped, religious schools, and schools with a small number of students are examples of schools that may not be counted as "availables."

As a group the attributes of the test takers in the 1979-80 school year include the following:

- There is a significantly higher proportion of seniors among test takers than there is in the high school population.

- A heavier proportion of test takers are in schools located in southern states

- About the same proportion of test takers as in the military age youth population score within the "average" range of the AFQT mental category distribution; however, a smaller proportion of the high school test takers scored in the "above average" groups and a higher proportion scored "below average "

- The largest group of test takers consists of those who plan to enter a four-year college or who are "undecided" as to their plans. Most of the students carry out their plans but many change their plans and enter service. Also, a sizable share of those who are "undecided" enter military service.

- A considerably higher proportion of test takers than is in the youth population definitely plan to enter military service and a substantial number actually do enlist

Because of these characteristics the list of names, addresses, and test scores of test takers that are provided to recruiters constitutes a suitable, if not ideal, list of pre-screened leads.

A considerable proportion of high school accessions come from among high school students who take the ASVAB offered by the DoD High School Testing Program. A total of about 86,000 accessions had occurred by September 30, 1980, that were related to the 1978-79 school year testing program. This includes about 71,000 accessions that were identified by matching social security numbers of test takers listed in MEPCOM's computer files with the social security numbers of accessions in the Services' computer files on accessions. The total of 86,000 accessions also includes about 15,000 accessions of test takers from among the 20 percent of test takers (about 154,000 test takers) who did not have social security numbers at the time that they took the test.[1]/ A total of 86,000 accessions would amount, on a yearly basis, to about one-third of the annual five-year average of 207,000 high school graduate accessions.

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[1]/The data was furnished by the Defense Manpower Data Center.

In order to gain some insight into the reasons for discontinuance of ASVAB testing, telephone interviews were conducted with counselors from a sample of schools that discontinued testing in school year 1979-80. Counselors were queried about their primary reasons for discontinuing use of the ASVAB.

The primary reasons that counselors gave for administering the ASVAB were ranked in the order of their frequency as follows:

1.	Provide basis for counseling about college or general job aptitudes	44.8%
2.	Take advantage of free test service	26.0
3.	Cooperate with military services	20.2
4.	Provide basis for counseling about military service	3.6
5.	Measure student's progress in school	0.9
6.	Compare student's scores with those in other schools	0.0
7.	Other	4.5

The primary reasons that counselors gave for discontinuance of testing in school year 1979-80 were ranked in order of frequency as follows:

1.	School related difficulties of test administration (including lack of space, scheduling problems, lack of student cooperation)	37.2%
2.	Lack of sufficient student interest	12.1
3.	Test is not useful for civilian counseling	11.7
4.	Length of test	6.7
5.	ASVAB will be readministered	6.3
6.	Other test administration problems	6.3
7.	Too much testing	3.6
8.	Other reasons	4.9

Nearly 40 percent of the schools that discontinued testing had less than 25 students take the test compared with an average size test session of 66 in all schools.

Army Education Coordinators were interviewed by telephone to obtain their suggestions for improving the high school testing program.[1/] The 41 Education Coordinators who were contacted made 106 suggestions. The suggestions are summarized below:

Improvements in the test instrument	44
Improvements in administration of the test	22
Improvements in test promotion	28
Staff-oriented improvements	7
Improvements in general administration	5

There were 11 different specific suggestions that were each made by 3 or more Education Coordinators. These 11 specific suggestions accounted for nearly half (47.8 percent) of the total 106 suggestions. These specific suggestions are listed in the order of the frequency with which they were mentioned by the Education Coordinators:

Make the test shorter	10
Centralize scheduling, testing, test promotion within DRC-AFEES	8
Increase usefulness of ASVAB as a vocational test; tie results to specific civilian jobs	8
Combine with other vocational tests such as GATB or DAT	6
Change name of test to eliminate reference to military	4
Issue Counselor's Manual with career program orientation	4
More advertising in schools	4
Improve validity of test	3
Better training for recruiters on ASVAB	3
National advertising of ASVAB as vocational test	3

[1/] Navy representatives were contacted for permission to interview their Education Specialists but the Navy elected not to participate in the survey.

MEPCOM send materials to District on timely basis	3
Employ more testers/NCO testers	3

In spite of the decline in the number of students and schools that are tested in the High School Testing Program, the ASVAB is by far the most widely used career guidance test, particularly among seniors. A 1979 survey showed that nine out of ten schools used a career guidance test in grades 7-12 and seven out of ten schools used the ASVAB. Sixty-three percent of the schools reported that they administered the ASVAB to seniors; the nearest competitors were the Strong or Strong Campbell Inventory administered to seniors at 16 percent of the schools and the General Aptitude Test Battery (GATB) administered to seniors at 13 percent of the schools.

It is feasible to supplement the DoD High School Testing Program with the names and addresses of students who take selected commercial tests and agree for their names to be given to Defense recruiters. The commercial tests identified as suitable for use at present are the Career Planning Program (CPP) of the American College Testing organization, the Differential Aptitude Test (DAT) of the Psychological Corporation, and the American College Testing (ACT) Assessment Program. In order to obtain names, addresses, test scores and other information useful as recruiting leads from these commercial tests, DoD would need to subsidize the administration of the tests.

A pilot test of the use of the Career Planning Program (CPP) was conducted at three Sacramento high schools. The administration included 12 questionnaire items designed for use in Defense recruiting. The number of participating juniors and seniors was 1,240. About 27 percent of the participants were willing to make their records available for contact by recruiters and an additional 33 percent were willing to receive recruitment literature through ACT. Testing costs were estimated at $4.50 per test taker.

A larger scale pilot test than the one conducted in Sacramento is needed to determine how commercial tests can be used to supplement the DoD High School Testing Program.[1/] As noted above, the ASVAB is more widely used among seniors than all other career guidance tests combined. The use of commercial tests as a supplement appears to be relatively attractive in the northeastern and midwestern geographic regions where ASVAB penetration of the high school market is not as large as in the southern and southwestern regions of the country. Careful planning in the use of commercial tests will be needed to avoid weakening the current high school testing program.

As a replacement to ASVAB 5 there are a number of advantages in using a form of the ASVAB that was nationally normed. Although ASVAB 5 has been criticized by some psychologists, ASVAB is a "trade name" that, on the whole, is well regarded by high school counselors and other school officials. The benefits of retaining the present name are, therefore, significant. MEPCOM's

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[1/] DoD plans such a large scale test during 1982.

use of national norming data in its technical publications would enhance counselor perceptons of the reliability of the ASVAB. The availability of norms for the 1980 youth population may be expected to facilitate the marketing of the test.

The employment in February 1982 of civilian representatives from MEPCOM to assist in coordination of the program, marketing, and interpretation of the test to counselors at 17 AFEES is a constructive initiative. The establishment of this position will, in time, meet the need for a focal point of staff responsibility for the program at District Recruiting Command-AFEES level. It is likely that the duties of the position will evolve so that the incumbent of this position provides the staff assistance needed at the local level for management of this program. Experience with this program initiative during school year 1972-73 should be evaluated.

TABLE OF CONTENTS

	Page
CHAPTER 1 - THE HIGH SCHOOL TESTING PROGRAM	1
Summary of the Program History	1
Number of Schools and Students Tested	4
Educational Level of Test Takers	5
Variation in Results at AFEES-IRC	8
Use of ASVAB Compared with Other Career Guidance Tests	12
Characteristics of Test Takers	14
AFQT Group Distribution of Test Takers	16
Future Plans of Test Takers	18
Accessions Related to High School Testing	22
Accessions Related to High School Program - by Services	24
Accessions by Future Plans of Test Takers	24
Costs of High School Testing	29
Summary of Conclusions	30
CHAPTER 2 - SURVEY OF HIGH SCHOOLS THAT DISCONTINUED ASVAB TESTING	33
Approach	33
Description of Sample Included in the Survey	36
Summary of Information on Schools	39
Reasons for Electing to Administer the ASVAB	44
Reasons for Discontinuing Use of the ASVAB	48
Conclusions and Recommendations	55
CHAPTER 3 - SURVEY OF ARMY EDUCATION COORDINATORS	59
Changes Suggested by Education Coordinators	60
The Test	60
Administration of the Test	63
Promotion of the ASVAB	66
Staffing for the Administration of the ASVAB	69
General Program Administration	70
The Effect of Region and Beliefs About ASVAB on Recommendations	72
Comparison of Views of Education Coordinators with the Views of Counselors in Schools that Discontinued Testing	73
Program Changes Inferred from Perceived Problems and General Performance of the High School ASVAB Program	74
Conclusions and Recommendations of Education Coordinators	79

Page

CHAPTER 4 - USE OF COMMERCIAL TEST DATA TO SUPPLEMENT THE ASVAB..... 83

Background..... 83
Feasibility of Obtaining the Results of Commercial Tests..... 84
Potential Utility of Commercial Test Information..... 89
Summary.....109

CHAPTER 5 - CONCLUSIONS AND RECOMMENDATIONS.....115

Recommendations.....118

APPENDICES

A Questionnaire for Telephone Survey of High School Counselors on ASVAB Use.....121

B Questionnaire Used for Survey of Army Education Coordinators.....127

C ACT Report to Students.....131

D Pilot Test of the ACT Career Planning Program (CPP) in Sacramento California High Schools for Defense Recruiting Purpose.....135

TABLES

1 High School Testing Program - Number of Schools and Students Tested..... 4

2 Number and Percent of Test Takers by Grade Level (1980-81 School Year)..... 5

3 High School Testing Program - Grade Level of Test Takers..... 6

4 Number of Juniors and Seniors Tested (SY 1976-77 thru SY 1980-81)..... 8

5 AFEES-IRC That Met 90% of Goal in Percentage of Seniors and Juniors Tested (School Year 1979-80)..... 9

6 Percentage of High School Seniors in Types of Curriculum, by Geographic Region..... 11

7 Percentage of Schools Reporting Use of Career Guidance Tests..... 12

TABLES, Continued

		Page
8	Percentage of Schools That Administer Tests (By Grade and Type of Test)	13
9	Percentage of Test Takers, by Sex, School Year 1979-80	15
10	Mental Group Distribution - High School Test Takers, National Youth Sample and Accessions (In Percentages)	16
11	AFQT Group Distribution of Test Takers, High School Testing Program by Sex, Race, and Educational Level (1979-80)	18
12	Percentage of Test Takers - Future Plans by Sex and Educational Level 1979-80	20
13	Percentage of 1980 Seniors Reporting Activity Expected After Graduation	21
14	Distribution of Active Force Accessions of High School Test Takers Compared with Total High School Accessions (FY80)	24
15	Number and Percent of Test Takers, by Plans 1978-79 School Year	25
16	Number and Percent of Accessions by Future Plans at Time of Test	26
17	Future Plans of Senior Test Takers Who Enlisted and Number of Accessions by Plans	27
18	Percent of Accessions by Future Plans at Time of Test by Sex and Educational Level	28
19	Future Plans of Male Senior Test Takers Who Enlisted and Number of Accessions by Plans	28
20	MEPCOM Costs - High School Test Program (SY 1979-80)	29
21	Student Participation and Distribution of Schools Which Tested the ASVAB in School Year 1978-79 but Did Not Test in School Year 1979-80 by Geographical District and State	37
22	Student Participation and Distribution of the Exploratory Survey Sample of Schools Which Tested the ASVAB in School Year 1978-79 but Did Not Test in School 1979-80 by Geographical District and State	40

TABLES, Continued

		Page
23	Summary Information on the Exploratory Survey Sample by Urban Rural Classification	43
24	All Reasons Given by Schools for Electing to Administer the ASVAB by Urban/Rural Classification	45
25	Primary Reasons Given by Schools for Electing to Administer the ASVAB by Urban/Rural Classification	45
26	All Reasons Given by Schools for Discontinuing Use of the ASVAB by Urban/Rural Classification	49
27	Primary Reasons Given by Schools for Discontinuing Use of the ASVAB by Urban/Rural Classification	54
28	Suggested Improvements in the ASVAB Test	61
29	Suggested Improvements in the Administration of the ASVAB Tests	64
30	Suggested Improvements in Test Promotion	67
31	Staff Oriented Improvements	70
32	Suggested Improvements in the General Administration of the Program	71
33	Perceived Problems in the ASVAB by Region	76
34	Average Scores on Selected Variables for Individuals Taking the ACT Assessment During the 1976-77 School Year and Those Who Later Joined a Military Service	101
35	Percentage Distribution of Enlistment Propensity Scores for Three Male Groups Taking the ACT: Non-Entrants into Military Service, Service Entrants, and Service Entrants Discharged Prior to Tour Completion	103

Chapter 1

THE HIGH SCHOOL TESTING PROGRAM

The purpose of this study is to reassess the High School Testing Program in consideration of the decline that has occurred over the past several years in the number of schools and the number of students tested. The results of the 1979-80 school year testing program are summarized, including accessions that are related to this testing program. The reasons for discontinuance of testing, as stated by high school counselors, and the opinions of Army Educational Coordinators about the program are analyzed. The possible use of commercial tests as a supplement to ASVAB in furnishing names and addresses to recruiters is also discussed.

Summary of the Program History

One or more of the military services have tested in the high schools since 1958. The Air Force initiated high school testing by offering the Airman Qualifying Examination in the high schools. The other services followed the Air Force lead and offered their own tests. Partly as a result of complaints from the high schools about too many unilateral contacts from the services, the Department of Defense established the joint high school testing program in 1968. At that time, the Armed Services Vocational Aptitude Battery (ASVAB) was developed and introduced as the test battery used in the high schools by all of the military services. The ASVAB was originally associated with the High School Testing Program; other tests were used for applicant testing at the Armed Forces Examining and Entrance Stations (AFEES) until 1976.

The characteristics of the joint program then were similar to those of the present program and to the prior programs conducted by the services. The test was administered in the high schools on behalf of all services and test

scores and other information on students tested was furnished to all services for use in recruiting operations. The test was usually offered to the schools on the basis of its usefulness in civilian counseling as well as its application in military recruiting, and test results were provided to counselors and other school officials. The test and test administration services were offered to the school free of charge.

At first the tasks of conducting the joint program were divided among the services. The Army had responsibility for test development, the Navy for development of a high school counselor's manual and the Air Force for processing test scores. During the transition to the volunteer force the services placed increased emphasis on the recruitment of high school graduates. In December 1972, in order to strengthen the High School Testing Program the Armed Forces Vocational Testing Group was established under the Air Force to administer the program on behalf of all the services.

The time period of AFVTG management - the test cycles for school year 1973-74 through 1975-76 - were the peak years for the program in terms of both the number of schools and the number of students tested. The peak was reached in school year 1974-75 when over 1,297,000 students were tested in 15,847 high schools. Since the peak year, the number of schools tested has declined in four of the six school years and the number of students has declined in five of the six school years. Although there was a slight increase in both the number of schools and students tested in the 1980-81 school year, there has been a general decline in participation over the past six years.

The school year test cycles after the peak years of 1974-75 and 1975-76 were marked by organizational changes and by outside criticism of the program. Among the events that appear to have affected participation in the program were:

- the function of management of the program was transferred in January 1976 from AFVTG, Air Force, to the Directorate of Testing of a newly organized command - the Army's Military Enlistment Processing Command. In connection with the consolidation of functions of test administration in MEPCOM, the test administrators of the recruiting services who administered the high school test program were transferred to MEPCOM and no longer assisted the recruiting organizations in marketing the program.
- the ASVAB, in 1976, became the single test used by all services for applicant testing, as well as high school testing; ASVAB (Form 5) was introduced for use in the high schools in July 1976.
- the OASD(M&RA) agreed with Congressman Charles A. Mosher that mandatory testing would be deemphasized as a matter of DoD policy.
- Dr. Lee J. Cronbach, Professor of Education of Stanford University, whose views were widely respected in the testing community, wrote the ASD(M&RA) in February 1977 that, in his opinion, the ASVAB was of limited use in civilian counseling; the Cronbach views were published in professional journals.
- During 1979-80 the misnorming of the ASVAB was discovered; corrected norms were published, and the misnorming became a matter of public knowledge.

While no single event had a major direct impact, all of them combined contributed to the decline in the number of schools and students that were tested.

Number of Schools and Students Tested

The early years of the joint High School Testing Program, beginning in school year 1968-69, were a period of year to year growth in the number of schools and in the number of students tested. The last six years have been characterized by declines in schools and students tested. In the initial years of expansion of the joint program, the percentage increase in students tested was about double the percentage increase in schools. The pattern since then has been one of a larger percentage decline in the number of students tested than schools tested. From the 1974-75 peak school year through the 1980-81 school year, the percentage decline in students tested (29.0%) was about double the decline in schools (14.4%). Measured from 1977-78, the first year of MEPCOM responsibility, the percentage decline in students (15.7%) was not quite double the percentage decline in schools tested (8.5%).

Table 1

High School Testing Program - Number of Schools and Students Tested

School Year	No. of Schools Tested	Number of Students Tested (In Thousands)
1968-69	7,100	350
1974-75 (peak)	15,847	1,297
1975-76	15,765	1,259
1976-77	14,809	1,094
1977-78	14,817	1,092
1978-79	13,587	965
1979-80 (low)	13,485	897
1980-81	13,558	921
1974-75 thru 1980-81	- 2,289	- 376

Source: MEPCOM chart, DOA High School Testing Program - June 8, 1980 and MEPCOM telecon for 1980-81.

Conditions not directly related to the High School Testing Program probably account in part for the decline. High school enrollments began to drop in the latter part of the decade of the 1970's. Enrollment declines in public schools, grades 9-12, began in 1977 from a peak enrollment of 14,321,000. Enrollment was estimated at 13,233,000 in 1980 - a decline of about 7.6 percent since 1977.1/ Also, the decade of the 1970's, in general, was a period during which anti-testing sentiment was relatively strong. Although the effect of anti-testing bias cannot be measured, it most likely had some adverse influence on the High School Testing Program.

Educational Level of Test Takers

The decline in test takers is in part accounted for by a decrease in the number and proportion of freshmen and sophomores who took the test. As shown in Table 2, juniors and seniors constituted over 77 percent of the test taker population in the 1980-81 school year. This is an increase since the

Table 2

Number and Percent of Test Takers by Grade Level

(1980-81 School Year)

Grade	Number of Test Takers	Percent of Total
9	443,575	4.7
10	163,031	17.7
11	306,958	33.3
12	407,529	44.2
TOTAL	921,093	100.0

Source: MEPCOM Telecon - October 8, 1981.

1/National Center for Education Statistics "Projections of Education Statistics to 1885-86". (U.S. Government Printing Office. 1977)

1976-77 school year when juniors and seniors comprised 67.8 percent of the test takers. The increase in the proportion of juniors and seniors is attributable mostly to a decrease in the number of freshmen and sophomores taking the test; the decrease in freshmen and sophomore test takers is accompanied by a modest increase in the number of juniors which is offset by a modest decrease in seniors, as shown in Table 3. The potential recruiting use of the names and addresses of high school test takers is enhanced because the test takers are predominantly juniors and seniors.

Table 3

High School Testing Program - Grade Level of Test Takers

School Year	No. of Freshmen/ Sophomores	No. of Juniors	No. of Seniors	TOTAL
1976-77	325,689	271,758	469,914	1,094,371
1978-79	250,022	280,110	442,354	972,486
1979-80	219,942	276,950	396,789	893,681
1980-81	206,602	306,958	407,529	921,093
Difference 1976-77 thru 1980-81	-146,087	+ 35,190	- 62,385	-173,278
Percent Change 1976-77 thru 1980-81	- 41.4%	+ 12.9%	- 13.2%	- 15.8%

Source: DMDC Computer Print-Out of High School Testing Program, except 1980-81 numbers from MEPCOM by telecon October 8, 1981.

There are several reasons for the emphasis placed on testing juniors and seniors: Department of Defense policies encourage students to stay in school and to graduate prior to enlistment; students are usually 17-18 years of age when they graduate and most of them have reached the age of enlistment; test scores are valid for two years so that a junior could take the test, enlist in the Delayed Entry Program (DEP), and enter service after graduation.

In the more recent test cycles, the decline in test takers has predominantly consisted of freshmen and sophomores. Nearly 84 percent of the decline in test takers since the 1976-77 school year consisted of freshmen and sophomores. Since the names of freshmen and sophomores are not furnished to recruiters, a decrease in freshmen and sophomores test takers does not directly affect the number of recruiting leads or the number of accessions that are related to the test program.

From 1976-77 through 1980-81, the 11th grade was the only grade level in which there was an increase in the number of test takers. This is partially explained by an increased emphasis in the ASVAB Educational Bulletin and other guidance documents on the testing of juniors.

The heavier decline among freshmen and sophomores reflected in some measure the emphasis placed by the Interservice Recruitment Committees on testing juniors and seniors. In school year 1976-77, all students were included in the testing goals that the Joint Recruiting Commanders furnished the individual AFEES-IRC; in subsequent years only seniors and juniors were included in the testing goals and freshmen and sophomores were not counted toward the testing goals. An AFEES-IRC that concentrated on its goals would emphasize to counselors the reasons for testing juniors and seniors.

The number of names and addresses of juniors and seniors furnished to recruiters has, except in 1979-80, held up well, in spite of the decline in the number of schools and number of students tested. As shown below in Table 4, there were 27,000 fewer juniors and seniors tested in 1980-81 than in 1976-77. There was, however, a year to year gain in 1980-81; 40,987 more juniors and seniors tested in 1980-81 than in 1979-80.

Table 4

Number of Juniors and Seniors Tested

(SY 1976-77 thru SY 1980-81)

School Year	Number of Juniors and Seniors Tested
1976-77	741,682
1978-79	722,464
1979-80	673,739
1980-81	714,487

Variation in Results at AFEES-IRC

The decline from school year 1976-77 through school year 1979-80 in number of students and number of schools tested was pervasive among individual AFEES-IRC. All AFEES except seven tested fewer students and all except five tested fewer schools in school year 1978-79 than they tested in 1976-77.

The AFEES-IRC that tested more students and schools in school year 1979-80 than in 1976-77 are shown below:

AFEES that Tested More Students	AFEES that Tested More Schools
Little Rock	Little Rock
Shreveport	Shreveport
Memphis	Memphis
San Juan	San Juan
Baltimore	Fresno
Miami	Honolulu
Amarillo	

The AFEES-IRC areas in the Continental United States that tested more students and schools are mostly located in the south or southwest or, in the case of Fresno, California, in the western geographic region; none are located

in the Northeast or Midwest. This indicates the continuance of relatively favorable support of the program in the southern and southwestern areas of the country.

Although there was a decline in the number of students tested, nearly one-third of the AFEES-IRC met the goals for number of students tested that were set for them by the Joint Recruiting Commanders for the 1979-80 school year. This is about the same proportion of AFEES-IRC that met the Joint Recruiting Commanders' goals in 1976-77. In 1979-80, the goals were established in terms of seniors and juniors tested in contrast to the goal in 1976-77 that was stated as a percentage of available students to be tested. It may be inferred that the statement of the goal in terms of seniors and juniors was conducive to the decrease in the number of freshmen and sophomores who took the test; however, neither the decrease in the number of schools tested nor in the number of seniors tested could be attributed to the changed method of stating performance goals.

Following is a list of AFEES-IRC that accomplished 90 percent or more, of their assigned goal; all of the listed AFEES-IRC are from the South, Southwest, or Western regions; none are from the Northeast or Midwest.

Table 5

AFEES-IRC that Met 90% of Goal in % of Seniors and Juniors Tested

(School Year 1979-80)

Atlanta	Shreveport
Beckley	Amarillo
Charlotte	El Paso
Miami	Houston
Jackson	Oklahoma City
San Juan	San Antonio
Montgomery	Boise
Nashville	Butte
Jackson	Salt Lake City
Little Rock	Spokane
Memphis	

The propensity for southern and southwestern schools to support the High School Testing Program may be explained in part by such factors as patriotism or relatively low per capita income and per capita school expenditures per student. The propensity to enlist is also relatively favorable in these geographic areas.

Differences in the educational characteristics of the high schools also help to explain the more favorable reception of the program in southern schools. Rural schools in all states have a tendency to test a greater percentage of students in the High School Testing Program than urban schools; the average percentage of rural schools is larger in southern states than in other areas of the country (75% rural school in southern states compared to 67% rural school for the country as a whole).1/

There is a larger percentage of vocationally-oriented curricula in schools in southern areas. The percentage of the schools which require minimum competency tests is largest in the Northeast and much lower in the South. These are attributes of the school system which, in addition to the relatively favorable opinion of the military services in southern and southwestern areas, help explain the wider use of the ASVAB in schools in the southern and southwestern areas of the country.

Schools in the Northeast have the highest proportion of students in academic curriculum and schools in the South have the highest proportion in vocational curriculum.

1/Rural school is defined as a school located in a locality with population of 10,000 or less.

Table 6

Percentage of 1980 Public High School Seniors in Types of Curriculum, by Geographic Region [1]/

	Academic	General	Vocational
Northeast	51	24	25
South	33	39	28
North Central	35	40	24
West	34	45	20

There is a tendency for counselors and officials in academically oriented schools with a large proportion of college bound students to prefer to use other tests than the ASVAB for purposes of civilian counseling. Schools with vocational tracks prefer to use aptitude or career guidance tests including the ASVAB.[2]/

About one out of five high schools requires seniors to pass a minimum competency test for graduation but this requirement varies significantly by geographic region. While 37 percent of the schools in the northeast states and 29 percent of schools in the western states have such a requirement, only 15 percent of the schools in the South and 3 percent of the schools in the North Central region had such a requirement.[3]/ This helps to explain geographic differences in participation in the High School Testing Program since the ASVAB must compete with other tests for testing time.

[1]/Samuel S. Peng et al, "High School and Beyond, a National Longitudinal Study for the 1980's, Washington, D.C., National Center for Educational Statistics, April, 1981.

[2]/In the survey of schools that discontinued testing, discussed in Chapter 3, 44.8 percent of the counselors stated that the primary reason for administering the ASVAB was counseling about college or general job aptitudes; only 3 percent gave counseling about military service as the primary reason for administering the test.

[3]/Ibid.

Use of ASVAB Compared with Other Career Guidance Tests

In spite of the decreased use of ASVAB since the peak year of 1974-75, the ASVAB enjoys more widespread use in the schools than any other career guidance or vocational aptitude test, particularly among seniors.1/ Nine out of 10 schools in the survey administered career guidance tests and nearly 7 out of 10 used the ASVAB. Among seniors the ASVAB is used in almost as many schools as all other vocational guidance test and interest inventories combined. A 1979 survey of test usage in grades 7-12 in a sample of 547 schools showed that the ASVAB was used in 66 percent of the schools; its nearest competitors were the Differential Aptitude Test of the Psychological Corporation, used in 34 percent of the schools and the General Aptitude Test Battery of the Department of Labor used in 24 percent of the schools. The table below summarizes the survey results.

Table 7

Percentage of Schools Reporting Use of Career Guidance Tests

Name of Test	Any Grade	Seniors
All Career Guidance Tests	93%	79%
ASVAB	66	63
Differential Aptitude Test	34	3
GATB	24	13
Strong Strong-Campbell Inventory	19	16
Kuder or General Interest Survey	19	8
Ohio Vocational Interest Survey	3	14
Others (four tests)	8	19

1/Harold B. Engen et al, "Are Secondary School Still Using Standardized Tests?", The Personnel and Guidance Journal, January 1982. Schools were divided by grade level into three groups - grades 7-9, grades 7-12, and grades 9-12. Every 25th school in each group was selected for the sample.

Twenty-five percent of the schools reported having administered the ASVAB to nearly all students in at least one grade. Under circumstances where all students take the test, the inference may be made that the students were strongly encouraged by counselors or homeroom teachers to take the test.[1/]

As shown in the table below, the survey indicates that the ASVAB must not only share available testing time with other career guidance tests but also with achievement test batteries and additional types of tests.

Table 8

Percentage of Schools That Administer Tests [2/]

(By Grade and Type of Test)

Type of Test	Grade 9	10	11	12	Any Grade
Career Guidance	47	55	66	79	93
Achievement Test	50	38	39	18	76
Aptitude Test	38	26	31	17	66
Personality Inventory	8	9	9	7	16

[1/]In the survey of schools that discontinued ASVAB testing during the 1979-80 school year, survey results showed homeroom and classroom teachers informed students about the test in 94 percent of the schools; the next highest source of information about the test was use of material provided by the military services in 24.2 percent of the schools. See Chapter 2.

[2/]Engen, "Standardized Tests."

Characteristics of Test Takers

The attributes of test takers as a group would include the following:

- There is a significantly higher proportion of seniors among test takers than in the high school population.
- A heavier proportion of test takers are in schools located in southern states.
- The AFQT group distribution contains about the same proportion of personnel who score "average" as the youth population, a smaller proportion who score "above average", and a larger proportion who score "below average".
- The largest groups of test takers are those who have plans to enter a 4-year college or who are "undecided" as to their plans. Most of the students carry out their plans but a significant number change their plans and enter service.
- A higher proportion of test takers definitely plan to enter military service than exists in the military age population and a significant number of them actually do enlist.

These attributes help to make the high school test takers a favorable group that may be "prospected" by the recruiters in order to obtain leads for enlistment.

Slightly more males than females take the test. The distributions by sex are about the same for 1979-80 as they have been in previous years. The even distributions between males and females are found at all grade levels.

Table 9

Percentage of Test Takers, by Sex, School Year 1979-80

	Percent Males	Percent Females
Freshmen, Sophomores	52.7	47.3
Juniors	53.0	47.0
Seniors	52.0	48.0
TOTAL	**52.5**	**47.5**

The percentage of blacks among test takers was fairly stable for three school year testing programs that were examined:

School Year	Percent of Black Test Takers
1976-77	14.7
1978-79	14.2
1979-80	15.1

As shown below the percentages of blacks increased by grade level in the 1979-80 school year testing program:

Grade Level	Percent of Black Test Takers
Sophomores, Freshmen	11.4
Juniors	12.7
Seniors	18.8
TOTAL	**15.1**

Just as the percentage of total test takers is evenly divided by sex so is the subgroup of black test takers. The 15.1 percent of test takers who were in the black subgroup in 1979-80, however, consisted of 7.8 percent females and 7.3 percent males in contrast to the slightly larger percentage of males than females among total test takers.

AFQT Group Distribution of Test Takers

As shown in Table 10, the AFQT group distribution of test takers in the High School Testing Program has about the same proportion who scores in AFQT Group III (average) as the 1980 National Youth Sample. The high school takers have a smaller proportion who scored in AFQT Groups I and II (above average) and higher proportions who scored in AFQT Groups IV and V (below average).

Table 10

Mental Group Distribution - High School Test Takers, National Youth Sample and Accessions

(In Percentages)

Mental Group	High School Test Takers 1979-80	1980 Youth Population	1980-81 Accessions
I	1.6	4.4	2.4
II	15.5	32.7	30.0
III	31.4	31.7	47.3
IV	40.7	23.8	20.0
V	10.7	7.4	0.0

Source: MEPCOM computer files and "Profile of American Youth", OASD(MRA&L) March 1982 for data on 1980 Youth Population and 1980-81 accessions. Applicant and accession data are fiscal years.

The composition of the populations of test takers that are compared in Table 10 are not the same so that some differences in the distribution are to be expected. The test takers in the high schools include freshmen and sophomores; high school test takers are a younger age group than the youth population (ages 18-23) or the accessions; median scores of the youth population increase about two percentage points on the average for each year between ages 18-23 so their scores, as a group, would be expected to be higher on the average. Accessions are a selected group of the best qualified available applicants, chosen partly on the basis of aptitude test performance, and their test score distribution would be expected to be favorable in comparison with high school test takers or the national sample of youth. As is discussed below, counselors often state that the ASVAB is a suitable test for "average" students. This perception may help explain the relatively smaller proportions of high school test takers in the "above average" AFQT groups.

The high school test takers may be described, from a recruiting standpoint, as a pre-screened pool that largely consists of qualified young men and women; 48.5 percent of them score in the "average" or "above average" AFQT groups and an estimated 90 percent of those who actually enlist would be high school graduates at the time of their enlistment.

The differences in AFQT group distribution by sex and race, as shown in Table 11 for the 1979-80 high school test takers, are similar to the differences in previous programs.

- males have a slightly more favorable distribution than females.
- whites have a higher distribution of score than blacks.
- these differences by sex and race are found among seniors as well as juniors who take the test.

Table 11

AFQT Group Distribution of Test Takers, High School Testing Program by Sex, Race and Educational Level - 1979-80

AFQT Group	MALE		FEMALES	
	White	Black	White	Black
I	2.4%	0.1	1.2	0.0
II	20.2	2.4	15.4	1.4
IIIa	15.0	4.0	14.1	2.8
IIIb	20.2	10.0	20.4	7.6
IV	35.3	54.4	41.5	55.2
V	6.9	29.2	7.4	33.0

AFQT Group	SENIORS		JUNIORS	
	Male	Female	Male	Female
I	2.5	1.3	2.5	1.9
II	20.1	14.5	19.9	17.6
IIIa	14.4	13.1	14.3	13.8
IIIb	19.0	18.5	19.2	19.1
IV	35.2	41.7	35.7	38.5
V	8.8	10.9	8.4	9.1

Future Plans of Test Takers

In addition to furnishing test scores. the High School Testing Program provides the recruiter with useful information on the future plans of test takers. Students who take the test are asked to check one of the following boxes that best indicates their "future plans" at the time: military service, 4 year college, 2 year college, vocational-technical school, work, or undecided.

The future plans of test takers in the 1979-80 school year program may be broadly stated as follows:

- nearly half (49 percent) planned to continue their education in a 4 year college, 2 year college, or vocational-technical school.
- about 22 percent planned to enter gainful employment by going to work in a civilian job or by entering military service.
- about 29 percent are "undecided".

Table 12, summarized below, contains the Future Plans of test takers in school year 1979-80.

- **Military Plans.** 7.6 percent of test takers plan to enter military service; the percentage of males who plan to enter military service is larger than the percentage of females - 10.6 percent compared to 4.2 percent; the percentage of male juniors is 11.8 percent and for male seniors the percentage is 10.0 percent. The group that most frequently indicates military plans is male blacks; 21.9 percent of male blacks who take the test plan to enter military service.

- **Educational Plans.** The 49 percent of test takers who plan to continue their education include the following sub-groups:

4 Year College	33.2 percent
2 Year College	9.6 percent
Vocational Technical School	6.2 percent

A higher percentage of girls than boys plan on 4 years of college and a significantly higher percentage plan on 2 years of college. A larger proportion of boys plan to go to a vocational technical school.

- **Work Plans.** 14.2 percent of the test takers plan to go to work upon completion of high school. When those test takers who plan to go to work are added to those who plan to enter the military service, the result is 21.8 per cent of test takers who plan to look for gainful employment rather than continue their education.

- **Undecided.** 29.3 percent of test takers are undecided as to future plans - the largest single group after those bound for 4 year college. A slightly higher proportion of girls than boys and a slightly higher proportion of juniors than seniors are undecided.

Table 12

Percentage of Test Takers - Future Plans by Sex and Educational Level, School Year 1979-80

Future Plans	Seniors	Juniors	TOTAL All Students
	MALES		
Military Plans	10.0	11.8	10.6
4-Year College	32.7	31.8	31.3
2-Year College	7.9	6.3	6.9
Voc. Tech. School	8.9	7.1	7.4
Work	16.4	14.2	16.1
Undecided	24.1	28.7	27.8
	FEMALES		
Military Plans	4.6	4.4	4.2
4-Year College	35.5	36.7	35.3
2-Year College	14.0	12.3	12.6
Voc. Tech. School	6.6	4.5	5.0
Work	13.5	10.1	12.0
Undecided	25.7	32.0	31.0
	TOTAL		
Military Plans	10.6	4.2	7.6
4-Year College	31.3	35.3	33.2
2-Year College	6.9	12.6	9.6
Voc. Tech. School	7.4	5.0	6.2
Work	16.1	12.0	14.2
Undecided	27.8	31.0	29.3

The inference can be made that direct interest in entering military service is not one of the primary motives for taking the ASVAB in high school. Those who plan to enter military service constitute one of the smallest groups of test takers. In contrast both those who are bound for 4 years of college and those who are undecided constitute relatively larger subgroups of test takers. The undecided group may have a latent interest in

military service. As discussed later, they are a relatively good source of accessions. Based on their plans, it appears that most of the test takers are persuaded to take the test for reasons related to civilian counseling rather than to the military purposes of the test. As discussed in Chapter 2, 44.8 percent of the counselors who were surveyed said that their primary reason for administering the ASVAB was to "provide a basis for counseling about college or general job aptitudes."

The plans of test takers are generally similar to the primary activity expected one year after high school by seniors in 1980 who participated in the National Longitudinal Study.1/ The high school test takers have a larger percentage with military plans or undecided and a smaller proportion who plan on 4 year college, 2 year college, or work than the sample in the NLS.

Table 13

Percentage of 1980 Seniors Reporting Activity Expected After Graduation

Activity	Percent of Seniors
4 year college	35%
2 year college	15
Voc.-Tech. school, including business school	6
Work (Full-time or part-time)	29
Military service, including service academy	3
Other, including undecided	12

1/See Peng et al, "High School and Beyond".

Accessions Related to High School Testing

A significant proportion of high school graduate accessions come from among those who took the ASVAB offered by the DoD High School Testing Program. A total of about 71,000 accessions through September 30, 1980, were related to the 1978-79 school year testing program by matching social security numbers in the MEPCOM testing file and the accession files of the services. This number does not include students without social security numbers. The total would exceed 85,000 accessions if an additional 20 percent of the accessions were test takers without social security numbers; approximately 20 percent of accessions of test takers in 1976-77 were without social security numbers but this percentage may or may not be valid for the 1978-79 program. An estimated 85,000 accessions would amount to a significant proportion (41%) of the annual five-year average of 207,000 total high school graduate accessions. The estimated 85,000 accessions would amount to 25.5 percent of the annual five year average of 333,000 non prior service accessions.

The 71,126 accessions with social security numbers include the following subgroups:

- 42,917 juniors and seniors who entered with their high school test scores on ASVAB 5 as their qualifying test score of record. These accessions were identified by computer match of their social security numbers in the high school test file and the accessions file.

- 28,209 juniors and seniors whose social security numbers matched in the high school test file and the accessions file, but who were re-tested and enlisted with another form of the ASVAB as their qualifying test score of record.

In several past studies the number of test takers who enlisted was underestimated because many test takers who were re-tested were not counted among accessions who took the ASVAB in the high school program, although a recruiter may have identified them as a prospect by using the high school list. Also, many estimates included only the accessions that occurred within a year of the end of the school year in which the student took the test. In the study of the 1976-77 high school testing program an estimated 100,000 accessions were obtained. About 60 percent of the accessions related to this school year program occurred in FY 1977, when the test program was conducted, and about 40 per cent in FY 1978.

It would be difficult to prove that all of the recruits who previously took the high school ASVAB enlisted in military service solely because of the High School Testing Program. Many of the accessions would have occurred without the program. Test takers who already planned to enter military service at the time they took the test constituted a significant percentage of the accessions; presumably, most of this group would have taken the test at an AFEES, if it were not available in their high school. As with any lead list, the recruiter has a key role in determining the number of accessions that occur from among the names and addresses furnished by the lists of high school test takers.

The names and addresses of high school test takers constitute a good lead list. The estimated 85,000 accessions that were related to the 1978-79 school year testing program occurred from among 673,700 names and addresses of juniors and seniors who took the test. This is a ratio of about 1 enlistment for every name and address of 8 juniors and seniors who took the test.

Accessions Related to High School Testing Program - by Services

All services share in the accessions related to the high school test program in about the same proportion that they share in total high school graduate accessions, as shown by Table 14.

Table 14

Distribution of Active Force Accessions of High School Test Takers Compared with Total High School Accessions (FY 80) 1/

Services	No. of Accessions H.S. Test Takers 1/	% Distribution of Accessions H.S. Test Takers	% Distribution of Total H.S. Grads. Accessions
Army	26,024	36.6	35.2
Navy	17,724	24.9	27.0
Marine Corps	9,513	13.4	13.4
Air Force	17,865	25.1	24.4
TOTAL	71,126	100.0	100.0

Accessions by Future Plans of Test Takers

Prior to the discussion of accessions by plans at the time of the test, it is useful to consider again the distribution of test takers by plans without regard to whether they are accessions into military service.

1/Accessions with matching social security numbers in the High School Testing Program file and DMDC accession files.

Nearly one-third of the test takers fall in each of the two largest groups - those who plan 4 year college and those who are undecided. The remainder plan to work or to enter a two year college or a vocational technical school.

Table 15

Number and Percent of Test Takers, by Plans
1978-79 School Year

Future Plans	Number of Test Takers	% of Test Takers
Military Plans	68,641	7.1%
4 Year College	302,403	31.1
Undecided	304,309	31.2
Work	145,957	15.0
Voc. Tech.	60,226	6.2
2 Year College	90,960	9.4
TOTAL	972,496	100.0

Source: DMDC computer files - High School Testing Program. (Total number of test takers slightly higher than total of 971,796 in MEPCOM chart of June 8, 1980).

As indicated by Tables 15 and 16, the 7.1 percent of the test takers who plan to enter the military yield 37.4 percent of the accessions while the undecided group which is 31.3% of test takers is close behind with 30.2 percent of accessions. The 47 percent of test takers who expect to continue their education (four year college, two year college or vocational technical school) yield only 23 percent of the accessions; the 15 percent who plan to work yield 9.6 percent of the accessions.

Test takers who planned to enter military service and test takers who were undecided about their future plans at the time they took the test, when added, yield 67.6 percent of the accessions. The remainder of 32.4 per cent of the accessions come from those who planned to continue their education either at a 4 year college or at a vocational technical school or who planned to go to work.

Table 16

Number and Per Cent of Accessions by Future Plans at Time of Test 1/

Future Plans	Number of Accessions	Per Cent of Accessions
Military Plans	16,048	37.4
Undecided	12,940	30.1
4 Year College	5,611	13.0
Work	3,888	9.2
Voc. Tech. School	2,336	5.4
2 Year College	2,094	4.9
TOTAL	42,917	100.6

Source: DMDC computer files High School Testing Program. Accessions through September 1980 of test takers in 1978-79 school year.

The relatively larger yield of accessions from among test takers with Military Plans or from those who are undecided is found in each of the sub-groups of test takers: male seniors, male juniors, female seniors, and female juniors. Also, in each of the sub-groups a larger proportion of accessions come from 4 year college bound test takers who changed their plans than from those who had planned to work, or go to 2 year college, or vocational-technical school.

1/Information on future plans of test takers in Tables 16 - 19 is limited to test takers who entered with the high school test (ASVAB) as the test identifier and who had matching social security numbers in the high school test file and the accessions file.

A recruiter can establish priorities in working the lead lists furnished from the high school test by considering the chances of obtaining an accession. Table 17 shows the extent that the chances of obtaining an enlistment from among senior test takers varies depending on the student's plans at the time that the student took the test.

Table 17

Future Plans of Senior Test Takers who Enlisted and Number of Accessions by Plans 1/

Future Plans of Seniors	No. of Test Takers by Plans	Number of Accessions	Number of Accessions per 100 Test Takers
Military	30,686	16,048	52.3
Undecided	117,784	12,940	11.0
Work	70,431	3,888	5.5
Voc. Tech.	33,777	2,336	6.9
2 Year College	46,552	2,094	4.5
4 Year College	143,124	5,611	3.9
TOTAL	442,354	42,917	9.7

Source: DMDC computer files High School Testing Program. Accessions through September 1980 of test takers in 1978-79 school year.

Table 18 shows the percentage distribution by educational level and sex of future plans of test takers who are accessions. A larger proportion of juniors than seniors and a larger proportion of males than females state that they plan to enter military service. Table 19 shows the accessions of male seniors by plans, as of the time that they took the test. Among male seniors there are 10.7 accessions per 100 test takers.

1/High School test takers with social security numbers that match an accession with an ASVAB 5 score of record in DMDC files.

Table 18

Percent of Accessions by Future Plans at Time of Test
by Sex and Educational Level

Future Plans	MALES			FEMALES		
	Seniors	Juniors	TOTAL	Seniors	Juniors	TOTAL
Military Plans	36.0	40.9	37.6	37.3	37.8	36.4
Undecided	30.0	29.9	29.9	30.7	33.9	31.2
4 Year College	13.2	11.8	12.8	14.1	20.2	14.8
Work	10.0	8.8	9.6	5.9	4.3	5.9
Voc. Tech.	6.2	4.8	5.7	3.9	5.0	3.8
2 Year College	4.6	3.7	4.3	8.0	8.7	8.0

Source: DMDC computer files High School Testing Program. Accessions through September 1980 of test takers in 1978-79 school year.

The future plans, as of the time of the test, of male seniors who entered service are shown below.

Table 19

Future Plans of Male Senior Test Takers who Enlisted and Number of Accessions by Plans

(MALE SENIORS)

Future Plans	No. of Test Takers by Plans	No. of Accessions	No. of Accessions per 100 Test Takers
Military	21,159	8,876	41.9
Undecided	59,455	7,406	12.5
Work	40,588	2,468	6.1
Voc. Tech.	19,969	1,526	7.6
2 Year College	17,752	1,147	6.5
4 Year College	71,118	3,269	4.4
TOTAL	230,041	24,692	10.7

Source: DMDC computer files High School Testing Program. Accessions through 1980 of test takers in 1978-79 school year.

Costs of High School Testing

Most of the direct costs of the high school testing program are readily identifiable but some of the costs are not. Table 20 shows MEPCOM testing costs. The figures understate the costs for high school testing that would be shown if a share of the time of Education Specialists/Coordinators, recruiters and AFEES personnel who serve as proctors, or who perform other duties were allocated to the program. The positions of these personnel are not directly attributable to the high school testing program but a portion of their time is allocable. The total costs shown in Table 20 may be on the order of $1 million higher if all allocable costs were included.

Table 20

MEPCOM Costs - High School Test Program

(SY 1979-80)

Number of Test Sessions	14,920
Number of Examinations	985,106
Average Number of students in Test Session	66.02
OMA Costs	($1,757,302)
Allocation for Hdq. MEPCOM	($ 211,958)
Total	**$1,969,260**
Average Cost Per Test Session	$131.29
Average Cost Per Examination	$2.00

Source: OASD (MRA&L files); 12.6 percent of Hdq. MEPCOM costs allocated to High School Testing Program.

The average cost of a high school test session was $131.29 compared to $59.62 for a Mobile Examining Team (MET) site examination but the average cost of $2.00 per high school examination is much lower than the cost of $6.26 per examination at the MET site. The lower unit costs in each case are largely attributable to higher volume; the number of test sessions is larger in the case of MET sites and the number of test takers and the size of average test sessions is larger in the case of the high school testing program.

Although the cost estimates must be regarded as rough approximations, they show that the cost per examination of the high school test program is relatively low. The cost per lead to recruiters, estimated to be $2.92, is somewhat higher.1/ The number of leads per enlistment from among high school test takers is about 8 leads to one enlistment, using the number of 85,000 accessions related to the school year 1978-79 program as a basis for estimating.

Summary of Conclusions

The decline in the number of schools and students tested in the High School Testing Program appears to have reached a low point for the time being in school year 1980-81. The decline since school year 1976-77 coincided with the gradual decrease in high school enrollments, but this factor does not account for all of the decline. An internal decision to place more emphasis on testing juniors and seniors and less emphasis on testing freshmen and sophomores was a major factor in the decline. In spite of the decline, the program has largely maintained its benefits as a relatively low cost recruiting lead list of pre-screened names and addresses of high school seniors and juniors.

1/The cost per lead is estimated by dividing the costs of the school year program by the number of names and addresses of juniors and seniors furnished to recruiters.

The program continues to be relatively strong in the Southeast and Southwest. In the northeast and mid-western regions, particularly, there is a need for initiatives to improve student participation in the test program.

Chapter 2

SURVEY OF HIGH SCHOOLS THAT DISCONTINUED ASVAB TESTING

In order to explore the possible causes of the decline in ASVAB participation, guidance counselors at a sample of schools that discontinued ASVAB testing during school year 1979-80 were interviewed by telephone and asked to relate their experiences and attitudes concerning the test. This chapter describes the approach, results, and conclusions of the exploratory survey. Appendix A contains a copy of the questionnaire used for the telephone survey.

Approach

MEPCOM provided researchers with a list of secondary schools that administered the ASVAB in school year 1978-79 but discontinued testing during the following year. An initial sample of 450 secondary schools--or approximately 20 percent of the 2,246 schools reported to have discontinued ASVAB testing--were then selected from the list.

The number of sample schools chosen for each state duplicated approximately the comparable distribution of schools by states appearing in the MEPCOM data file. The proportion of rural and urban schools within each state was then determined from background statistics provided by the National Center for Education Statistics.1/ On the basis of school addresses (including information on county locations and telephone area codes), schools were designated as either "rural" or "urban" and apportioned, in accordance with the nationwide distribution of rural-urban schools, among the various states.

1/The urban-rural rating scale used by the Department of Education served as the basis for classifying a school as either rural or urban. In this rating scale, a rural school district is one located in a community with a population of 10,000 or less.

A pretest of the survey questions and methodology revealed a strong correlation between the number of students who took the ASVAB at individual schools and subsequent discontinuance. Many schools that had tested 25 or fewer students in 1978-79 generally stopped administering the ASVAB due to a "lack of student interest." For this reason, those schools that had tested more than 25 students in the 1978-79 school year are more heavily represented in the sample than if it were a random sample.

Secondary school counselors were telephoned between December 1980 and June 1981. Counselors and schools were not informed about the survey at any time prior to the actual administration of the survey. This procedure resulted in several problems:

1. Some counselors who are responsible for testing (and thus familiar with the ASVAB) are also teachers, and they were not readily available to participate in the survey. (This was especially true at small and rural schools.)

2. Some counselors (particularly those in larger, metropolitan school districts) were not informed about the decision to halt testing or preferred not to respond.

3. Some counselors gave initial explanations for the discontinuance of ASVAB testing--yet, in extended conversation, revealed conflicting attitudes or accounts of experiences with the test. ("You know, now that you mention it, we did have some problems with the test; and I think the test could be much improved if you just. . . .")

4. Most counselors could not supply precise historical data on previous use of the test, number of students tested, other tests used in student counseling, estimates of time spent in vocational counseling, or other specific facts regarding experience in ASVAB administration.

By June 1981, researchers had contacted 223 secondary schools--or 10 percent of all schools that had discontinued ASVAB testing--representing 48 states (excluding Alaska and Hawaii) and the District of Columbia.

After the interviewer identified himself/herself, counselors were informed about the nature, purpose, and sponsorship (Department of Defense) of the survey. They were told that the survey would last approximately five to ten minutes. The following descriptive data on the schools were first requested: (1) metropolitan/suburban/inner city/rural classification of the area served by the school; (2) type of curriculum offered (e.g., academic vs. vocational); (3) the percentage of students in the senior class who eventually go on to college; (4) student population of the school; and (5) other standardized tests that are regularly administered by the school for the purpose of student counseling.

Counselors were then asked to furnish information on the history of ASVAB testing in their schools--including previous school years in which it was administered, grades tested, and the basis of test administration (voluntary, mandatory, or other method). Finally, the counselors were asked to comment on the reasons why their school first elected to administer the ASVAB; the manner in which it was promoted or advertised; the reasons why the school decided to stop using the test; and their plans to administer or not administer the test in future school years.

All questions were posed in an informal manner. Most questions called for open-ended responses. Often, then, the particular order of questions varied--depending largely on what particular points the counselor wished to stress, amplify, or avoid. Indeed, in most cases the survey was more of a conversation (and sometimes a monologue on the part of counselors) than a question-and-answer session. The individual surveys lasted from five minutes to as long as forty-five minutes. The longer interviews were considerably more revealing.

Description of Sample Included in the Survey

Table 21 displays, by state and geographical district, the total number of schools (according to MEPCOM data files) that discontinued ASVAB testing during the 1979-80 school year; the average number of students tested per school; and the percentage of schools that tested (a) 25 or fewer students and (b) 100 or more students. It can be seen, first of all, that there is wide-spread variation between districts and states in the average number of students tested per school and in the relative ranges of student participation. Nationwide, about two out of every five schools (38.1 percent) tested 25 or fewer students during the 1978-79 school year. On the other hand, close to 20 per cent tested 100 or more students. It appears that the discontinuance of testing in the 1979-80 school year was largely an "urban" phenomenon. Seven of the ten states with the highest number of schools that discontinued testing are also among the ten states in the nation with the highest proportion of "urban" schools. (These include California, Illinois, New York, Ohio, Michigan, Pennsylvania, and New Jersey [tied with Oklahoma].) The urban states accounted for five times as many "dropouts" by schools as did the rural states.

Based on the preliminary analysis of data presented in Table 21, the results of survey pretesting, and the findings of previous research,1/ the present exploratory survey focused primarily on (a) schools that tested more than 25 students and (b) rural schools within states.

1/See Gus C. Lee, Evaluation of the DoD High School Testing Program FR-PO-79-1 (Alexandria, VA: Human Resources Research Organization, 1979.

Table 21

Student Participation and Distribution of Schools Which Tested the ASVAB in School Year 1978-79 but did not Test in School Year 1979-80 by Geographical District and State

Geographical District and State	Schools Which Tested in School Year 1978-1979 But Did Not Test in School Year 1979-1980			
	Number of Schools	Average Number of Students Tested Per School	Percent of Schools with > 100 Students Tested	Percent of Schools with < 25 Students Tested
New England				
Maine a/	20	109	30.0	40.0
New Hampshire	11	47	9.1	54.5
Vermont	6	107	50.0	33.3
Massachusetts	41	95	34.1	31.7
Rhode Island	10	38	0.0	40.0
Connecticut b/	32	106	43.8	31.3
Middle Atlantic				
New York	111	56	21.6	46.8
New Jersey c/	69	90	20.3	46.4
Pennsylvania d/	82	108	29.3	30.5
East North Central				
Ohio	103	59	13.6	42.7
Indiana	65	110	41.5	26.2
Illinois	137	62	14.6	29.9
Michigan	107	47	9.3	43.0
Wisconsin	66	44	10.6	48.5
West North Central				
Minnesota	73	36	5.5	56.2
Iowa	64	23	1.6	82.8
Missouri e/	34	106	23.5	26.5
North Dakota	36	23	0.0	63.9
South Dakota	14	40	14.3	50.0
Nebraska	21	40	0.0	38.1
Kansas	42	28	7.1	66.7
South Atlantic				
Delaware	1	20	0.0	100.0
Maryland	50	66	18.0	36.0
District of Columbia	3	33	0.0	33.3
Virginia	33	89	30.3	36.4
West Virginia	19	66	15.8	21.1
North Carolina	19	99	31.6	31.6
South Carolina	24	83	29.2	20.8
Georgia f/	52	129	40.4	13.5
Florida g/	49	145	28.6	8.2

Table 21, Continued

Geographical District and State	Schools Which Tested in School Year 1978-1979 But Did Not Test in School Year 1979-1980			
	Number of Schools	Average Number of Students Tested per School	Percent of Schools with > 100 Students Tested	Percent of Schools with < 25 Students Tested
East South Central				
Kentucky	52	71	7.7	17.3
Tennessee	53	89	20.8	15.1
Alabama	56	82	23.2	16.1
Mississippi	27	64	14.8	11.1
West South Central				
Arkansas h/	20	134	20.0	35.0
Louisiana	42	96	23.8	35.7
Oklahoma	69	67	18.8	31.9
Texas i/	138	143	26.1	34.8
Mountain				
Montana	73	36	5.5	56.2
Idaho	11	80	18.2	45.5
Wyoming	8	29	0.0	50.0
Colorado	66	39	4.5	48.5
New Mexico	13	62	15.4	38.5
Arizona	17	70	29.4	29.4
Nevada	1	32	0.0	0.0
Utah	19	98	31.6	26.3
Pacific				
Washington	34	40	5.9	50.0
Oregon	34	41	11.8	44.1
California	166	59	17.5	47.6
Alaska	6	43	16.7	33.3
Hawaii	10	112	60.0	10.0
TOTAL	2,246	74	18.7	38.1

a/ Includes four schools with a combined total of 1,905 students tested.
b/ Includes five schools with a combined total of 2,046 students tested.
c/ Includes two schools with a combined total of 2,548 students tested.
d/ Includes one school with 1,034 students tested
e/ Includes four schools with a combined total of 1,905 students tested.
f/ Includes one school with 1,078 students tested.
g/ Includes two schools with a combined total of 2,816 students tested.
h/ Includes three schools with a combined total of 2,045 students tested.
i/ Includes nine schools with a combined total of 9,194 students tested.

Source: Derived from data provided by HQ MEPCOM/MEPCT-T, 9 May 1980.

Table 22 provides a summary description of the exploratory survey sample. The data presented here show that the sample is not representative of the total population of schools. Of the 223 schools called, for example, only one out of four had tested 50 or fewer students. In contrast, over 60 per cent of the total population tested 50 or fewer students--while close to 40 per cent tested 25 or fewer students. At the same time, over 40 percent of the survey sample tested 100 or more students, with an average of 133 students tested per school. Only 18.7 per cent of the total population of schools had tested 100 or more students in the 1978-79 school year, and the average participation rate per school was 74 students (see Table 21).

Although the survey sample does not represent the total population of schools in terms of the numbers of students tested, it does approximate the ratio of urban to rural schools, by state, within the nation. Most of the states in which only rural schools were surveyed are, in fact, overwhelmingly rural; half of these states have between 94 and 100 percent rural schools, while the rest have an average of no more than 16 percent urban schools.

Summary of Information on Schools

Before the guidance counselors were asked about their attitudes and experiences with the ASVAB, several items of background information were requested. Virtually all schools that were called indicated their basic curriculum was "primarily academic" as distinguished from "vocational". Most of the schools in both urban and rural settings were also veteran ASVAB testers. As seen in Table 22, close to 70 percent of the urban sample and over four out of five rural schools had tested with the ASVAB previously. Approximately 14 percent of the survey sample indicated that they tested only 12th graders. However, over half of both the rural and urban schools tested

Table 22

Student Participation and Distribution of the Exploratory Survey Sample of Schools Which Tested the ASVAB in School Year 1978-1979 but did not Test in School Year 1979-1980 by Geographical District and State

Geographical District and State	Exploratory Survey Sample of Schools Which Tested in School Year 1978-1979 But Did Not Test in School Year 1979-1980				
	Number of Schools	Average Number of Students Tested Per School	Percent of Schools with ≥ 100 Students Tested	Percent of Schools with ≤ 50 Students Tested	Estimated Percent of "Rural" Schools
New England					
Maine	2	382	50.0	0.0	100.0
New Hampshire	1	44	0.0	100.0	100.0
Vermont	1	176	100.0	0.0	66.7
Massachusetts	6	116	50.0	16.7	50.0
Rhode Island	2	103	50.0	50.0	33.3
Connecticut	3	110	66.7	0.0	
Middle Atlantic					
New York	15	113	20.0	40.0	40.0
New Jersey	6	163	83.3	16.7	33.3
Pennsylvania	13	137	46.1	23.1	38.5
East North Central					
Ohio	6	149	33.3	33.3	50.0
Indiana	6	143	66.7	0.0	66.7
Illinois	6	99	16.7	0.0	66.7
Michigan	7	108	42.8	14.3	57.1
Wisconsin	6	90	33.3	33.3	66.7
West North Central					
Minnesota	5	108	40.0	60.0	80.0
Iowa	5	83	20.0	4.0	80.0
Missouri	3	160	50.0	16.7	66.7
North Dakota	2	48	0.0	50.0	100.0
South Dakota	2	73	50.0	50.0	100.0
Nebraska	3	57	0.0	66.7	100.0
Kansas	3	79	33.3	66.7	100.0
South Atlantic					
Delaware	1	20	0.0	100.0	100.0
Maryland	5	132	40.0	40.0	60.0
District of Columbia	1	56	0.0	0.0	0.0
Virginia	6	161	66.7	0.0	66.7
West Virginia	3	84	33.3	33.3	100.0
North Carolina	6	106	50.0	33.3	83.3
South Carolina	4	117	25.0	25.0	75.0
Georgia	5	239	80.0	0.0	80.0
Florida	7	175	42.8	14.3	71.4

Table 22, Continued

Geographical District and State	Exploratory Survey Sample of Schools Which Tested in School Year 1978-1979 But Did Not Test in School Year 1979-1980				
	Number of Schools	Average Number of Students Tested Per School	Percent of Schools with ≥ 100 Students Tested	Percent of Schools ≤ 50 Students Tested	Estimated Percent of "Rural" Schools
East South Central					
Kentucky	3	91	33.3	0.0	100.0
Tennessee	4	113	25.0	0.0	75.0
Alabama	6	170	50.0	16.7	66.7
Mississippi	3	81	33.3	33.3	100.0
West South Central					
Arkansas	3	358	66.7	33.3	100.0
Louisiana	4	212	50.0	25.0	75.0
Oklahoma	5	188	40.0	20.0	80.0
Texas	8	268	62.5	0.0	75.0
Mountain					
Montana	5	45	0.0	50.0	80.0
Idaho	2	53	0.0	50.0	100.0
Wyoming	1	33	0.0	100.0	100.0
Colorado	3	124	33.3	33.3	66.7
New Mexico	2	221	50.0	50.0	100.0
Arizona	2	106	50.0	0.0	100.0
Nevada	1	35	0.0	100.0	100.0
Utah	1	33	0.0	100.0	100.0
Pacific					
Washington	6	73	16.7	33.3	83.3
Oregon	4	88	50.0	25.0	75.0
California	19	111	42.1	15.8	57.9
Alaska	0	0	0.0	0.0	0.0
Hawaii	0	0	0.0	0.0	0.0
TOTAL	223	133	41.2	25.1	68.6

exclusively 11th and 12th graders--while about one out of three schools tested freshmen and/or sophomores as part of their ASVAB program. Although the sample is small, the data suggest that the ASVAB is put to wider use in rural schools: almost nine out of ten rural schools offered the test to students other than seniors, compared with slightly less than four out of five urban schools.

The basis of ASVAB administration is similar in both urban and rural schools, although rural schools appear to more "strongly encourage" participation by their students. Overall, close to one out of three schools in the survey sample claimed to either (a) require participation by certain students, or (b) "require" participation by certain students "except those who strongly object to the test" or "do not wish to take the test for personal reasons." (The latter category is somewhat unusual. Test participation is ostensibly voluntary, but students at these schools are urged to take the test. In effect, the basis of administration is neither required nor strictly voluntary. When students are pressured or "urged" to participate, however, the basis of administration is probably closer to being mandatory than otherwise.)

As shown in Table 23, the survey sample of schools used a variety of methods to publicize the test and inform students. Urban schools emphasized public address announcements (including assembly presentations) to a much greater extent than did rural schools. In addition, the urban schools in this sample usually provided students with more military materials and school materials on the ASVAB. Although rural schools apparently were more inclined to allow presentations by military representatives, the data suggest that most of these schools relied almost exclusively on announcements by homeroom or class teachers (including bulletin board notices).

Table 23

Summary Information on the Exploratory Survey Sample of Schools by Urban/Rural Classification

Summary Information on Survey Sample of Schools	Survey Group Response Distribution (percent) Urban N=70	Rural N=153	Total N=223
A. Previous Testing with ASVAB			
Yes	68.6	83.0	78.5
No	31.4	17.0	21.5
B. Grades Tested			
12th Grade only	18.6	12.4	14.3
11th and 12th grades only	54.3	54.9	54.8
Other a/	27.1	32.7	30.9
C. Basis of ASVAB Administration			
Required	11.4	14.4	13.4
Voluntary	74.3	64.7	67.7
Other b/	14.3	20.9	18.8
D. Methods of Informing Students			
Public Address Announcements	47.1	5.2	18.4
Homeroom/Class Teachers	90.0	96.1	94.2
Military Representatives	8.6	13.1	11.6
Material Provided by Military	31.4	20.3	24.2
Material Provided by School	34.3	8.5	16.6
E. Plans for Future Use of ASVAB			
Yes c/	15.7	13.7	14.3
No	51.4	30.1	36.8
Not Sure	32.9	56.2	48.9

a/ This category shows schools which test several grades or only one grade, including those at or below the 10th grade level.

b/ This category includes schools which "strongly encourage" test participation and those which "require" participation by certain students ("except those who strongly object to the test").

c/ Over 6 percent of the total sample--including four urban schools (5.7 percent) and ten rural schools (6.5 percent)--were testing with the ASVAB at the time of the survey.

Approximately 14 percent of all schools expressed definite plans to use the ASVAB again. Close to half of all schools sampled (32.9 percent of urban schools and 56.2 percent of rural schools) indicated tht they might consider testing sometime in the future. Overall, guidance counselors at about one out of three schools in the sample stated that they had no immediate plans to administer the ASVAB again. Generally, then, in this particular survey sample, there are indications that many secondary schools which discontinued testing can be brought back into the testing program with appropriate marketing or response to their problems.

Several counselors in both urban and rural schools mentioned the fact that their schools were beginning to cut back testing other than ASVAB in response to budget pressures. Standardized testing of all types occurs in frequent, but varying, degrees at virtually all schools. As a rule, more tests are administered to students at or through "urban" schools and at schools that emphasize preparation for college (i.e., schools with relatively high proportions of college-bound students and schools located in more affluent communities).

Reasons for Electing to Administer the ASVAB

There were six major reasons given by counselors for administering the ASVAB, accounting for over 90 percent of the alternative responses. Table 24 shows the distribution of responses when counselors were asked to state all reasons for giving the test. Table 25 shows the distribution of responses by counselors when they were asked to select the primary reason for giving the test.

When the high school counselors were asked to list all reasons why their schools first elected to participate in the testing program, practically every counselor--regardless of location--indicated the potential usefulness of the

Table 24

All Reasons Given by Schools for Electing to Administer the ASVAB by Urban/Rural Classification

All Reasons for Electing to Administer the ASVAB*	Survey Group Response Distribution (percent) Urban N=70	Rural N=153	Total N=223
Provide Basis for Counseling about College or General Job Aptitudes	90.0	96.1	94.2
Take Advantage of Free Test Service	84.3	87.6	86.5
Cooperate with Military Services	32.8	64.0	54.3
Provide Basis for Counseling about Military Service	11.4	45.1	34.5
Measure Student's Progress in School	8.6	31.4	24.2
Compare Student's Scores with Those in Other Schools	15.7	7.8	10.3
Other	11.4	9.1	9.9

*Survey Question: "Why did your school elect to administer the ASVAB?" (Please give all reasons.)

Table 25

Primary Reasons Given by Schools for Electing to Administer the ASVAB by Urban/Rural Classification

Primary Reason for Electing to Administer the ASVAB*	Survey Group Response Distribution (Percent) Urban N=70	Rural N=153	Total N=223
Provide Basis for Counseling About College or General Job Aptitudes	54.3	40.5	44.8
Take Advantage of Free Test Service	30.0	24.2	26.0
Cooperate with Military Services	8.6	25.5	20.2
Provide Basis for Counseling about Military Service	0.0	5.2	3.6
Measure Student's Progress in School	0.0	1.3	0.9
Compare Students' Scores with Those In Other Schools	0.0	0.0	0.0
Other	7.1	3.3	4.5
TOTAL	100.0	100.0	100.0

*Survey Question: "What was your school's primary reason for administering the ASVAB?"

ASVAB as a counseling device. Of course, these are guidance counselors talking; yet, as Table 24 shows, over nine out of ten schools stressed the desire to use the ASVAB as a "basis for counseling about college or general job aptitudes." A slightly less popular reason--still selected by well over 80 percent of both urban and rural school counselors--is the economic incentive for using the ASVAB: the test service is free.

About two out of three rural school counselors--compared with one out of three urban school counselors--stated that they wished to "cooperate with the military." Even for urban schools, the frequency of this response is surprisingly high.

Two of the more basic reasons for test administration--such as counseling for military service and measurement of a student's progress in school--are generally more important to rural schools than to urban schools. For example, the proportion of rural schools that sought to use the ASVAB for military counseling (45.1 percent) was four-times as great as the comparable proportion or urban schools; the proportion of rural schools that administered the test in order to evaluate student progress (31.4 percent) was likewise almost four-times larger than the proportion of urban schools in this category.

Urban schools, on the other hand, exhibited a greater tendency than rural schools to use the test, or to seek to use the test, for the purpose of comparing scores with other schools. Some guidance counselors at both urban and rural schools also mentioned a variety of other reasons for administering the test--including (a) interest in "seeing how the test operated" (among new schools), (b) experimentation and "gauging student reactions," (c) "the school administration had its own reasons," and (d) "compare the test with others we

administer." (One of the most unusual "other" reasons was found at a Catholic school for girls, where the entire school is given the test every three years. The most important reason for administering the test at this school is was to "give the girls a chance to test their aptitudes in non-traditional job fields.") On the average, individual counselors at rural schools stated between three and four reasons for using the ASVAB; individual counselors at urban schools generally mentioned between two and three reasons.

In a follow-up question, guidance counselors were asked to state their primary reason for administering the ASVAB. The response distributions for this question appear in Table 25. Clearly, the most popular reason--offered by 54.3 percent of urban school counselors and 40.5 percent of rural school counselors--was "provide a basis for general counseling." About one out of four schools, overall, used the test primarily because it was a "free test service" with a potentially valuable payoff.1/ Also, just over one-quarter of the rural school counselors again stated that their primary reason for using the test was to "cooperate with the military." Close to one out of ten urban school counselors still cited "cooperation with the military services" as the single most important reason for bringing the ASVAB into their schools.

1/The findings are generally consistent with those of a 1979 survey on the use of standardized tests in a sample of 547 schools. Approximately 70 percent of the counselors said they would do more career guidance testing if time and money permitted. One conclusion of the authors was that the popularity of the ASVAB is "because it is free and because free assistance with its administration and interpretation is provided by military recruiters." See Harold B. Engen et al., "Are Secondary Schools Still Using Standardized Tests?" Personnel and Guidance Journal, January 1982.

Reasons for Discontinuing Use of the ASVAB

Ordinarily, one would expect to find a strong correlation between the reason(s) for initiating an activity and the reason(s) for stopping that activity. If the vast majority of these high school counselors decided to use the ASVAB because of its potential value as a counseling device, the expectation would be that a similarly large proportion of counselors (the same counselors) would discontinue use of the test if they discovered that it failed to accomplish its intended purpose. As seen in Table 26, there is some dissatisfaction with the test itself--especially at urban schools, where 25.7 percent of the guidance counselors complained about the test's limited utility for non-military counseling. Nevertheless, the most frequently cited reason for discontinuing use of the ASVAB--mentioned by 41.4 percent of urban school counselors and 38.5 percent of rural school counselors--was school-related test administration problems.

School-related test administration problems included: (a) lack of space; (b) lack of student cooperation ("too many kids taking the test," or "difficulties testing the kids"); (c) scheduling problems ("We scheduled for one day and it was changed; we just couldn't reschedule it."); (d) supervision or arrangement of supervision ("teachers complained"); (e) conflicts with "daily routines"; and (f) general administration or processing difficulties. (At one school, the test was administered to 300 students over the school's public address system. The students remained in their homerooms. Test administration lasted well over three hours because of coordination problems.)

Approximately 11 percent of the urban sample and 8 percent of the rural sample said that "other" test administration problems influenced their decision to discontinue testing. Some counselors complained about the "inflexible

Table 26

All Reasons Given by Schools for Discontinuing Use of the ASVAB by Urban/Rural Classification

All Reasons for Discontinuing Use of the ASVAB*	Survey Group Response Distribution (Percent) Urban N=70	Rural N=153	Total N=223
School-Related Test Administration Problems	41.4	38.5	39.5
Test is Not Useful for Non-Military Counseling	25.7	18.9	21.1
Lack of Sufficient Student Interest	17.1	14.4	15.2
School Elected to Skip One Year or More of ASVAB Testing	8.6	13.1	11.6
Length of Test	12.8	8.5	9.9
Other Test Administration Problems	11.4	7.8	9.0
School Population is Primarily College-Bound and Other Tests are Better	7.1	3.9	4.9
General Experience with Test was Unfavorable	8.6	3.3	4.9
Too Much Testing	10.0	1.3	4.0
Parents Objected to Use of Military-Sponsored Test	4.2	1.3	2.2
Adverse Publicity about ASVAB	2.9	0.6	1.3
Other/No Response	4.2	2.0	2.7
Does not Apply; ASVAB Readministered	5.7	6.5	6.3

*Survey Question: "Why did your school decide to discontinue ASVAB testing?" (Please give all reasons.)

attitudes" of test administrators and the difficulties encountered in rescheduling the test. Others remarked about how they were "not especially satisfied" with the test administrators. "There were too many kids in the sessions," one counselor remarked, "and the test administrator was too strict. I personally liked the way the military gave it. . .much better than the civilians." "My brightest students finished the test well before the period was over," another counselor commented; "then they became bored and restless and disruptive. The proctors just couldn't handle it."

Complaints about the "limited usefulness" of the ASVAB for non-military counseling varied in degree and substance. A few counselors from urban areas were especially harsh in their evaluations of the test itself. Others remarked in general terms about the "basic flaws" of the ASVAB. A common criticism here was (in the words of one counselor): "The test is good for some kids at the lower end of the aptitude scale, but it doesn't do too much for those in the middle." Still other counselors questioned the way in which test results are reported. Some, for example, recommended that the results be reported with "press-on tape" ("like the DAT sends us") so "we can stick the students' scores right onto their transcripts." Even though comparison measures are provided with the results of the tests, a few counselors indicated their desire to see "scores based on some kind of percentile with a common denominator."1/

In both urban and rural schools, several counselors took the opportunity to recommend the incorporation of "more civilian-type vocational materials" or "more academic" test items. At the same time, about one out of ten counselors criticized the test for being "too long."

1/Press-on tape and percentile score norms are both provided by MEPCOM; however, counselors are often not aware of the information currently available.

Many of the same guidance counselors who expressed a preference for other tests because their students were "primarily college-bound" also complained about the fact that "there is already too much testing."1/ It should be noted that these counselors did not generally criticize testing per se--but the over-testing that occurs in their own schools.

A relatively small proportion reported that "adverse publicity" influenced their decision to drop the test. Very few counselors indicated that objections to the use of a military-sponsored test--either by parents or by the students themselves--had any effect on the school's action to discontinue ASVAB testing; nevertheless, when the subject of parental protest was brought up, several counselors noted that "a few parents and kids have raised objections." A number of counselors observed that there has been a "sudden surge of patriotism" in the past one or two years; a "greater willingness to support the volunteer military." In general, anti-military sentiment did not appear to be widespread or to have been a significant cause of the discontinuance of testing.

1/It is estimated that American children in grades 1 through 12 participate in about 300 million tests per year. Three out of four public school systems use a systematic scheme of standardized testing. And, it was reported in 1977, over 50 million of America's youth are exposed to up to three standardized tests each during their school years (a very conservative estimate, by most accounts).

These figures were extracted from one recently-published critique of standardized tests (referred by a guidance counselor). As the author writes: "The trickle of skepticism about the accuracy and fairness of virtually compulsory standardized tests has become a torrent of vociferous criticism." (See A. J. Strenio, Jr., The Testing Trap [New York: Rawson, Wade Publishers, Inc., 1981], pp. 44-46.)

In their 1979 survey of a sample of 547 schools, grades 7-12, it was found that nine out of 10 schools use career guidance tests, three out of four administer achievement tests, and two out of three use aptitude tests. "The majority of schools administer each of these categories of tests to all students in one or more grades." See Engen, "Standardized Tests."

A small proportion (4.9 percent) of guidance counselors stated that their "general experience" with the test was "unfavorable." These were usually the same counselors who said that they were "experimenting" with the ASVAB, or those who were not direct or specific in their responses to the survey questions.

Approximately 17 percent of the urban sample and 14 percent of the rural sample stated that a "lack of student interest" had some influence on the decision to stop testing. It should be noted that over 38 percent of all schools in the population that discontinued the ASVAB tested 25 or fewer students (Table 21); yet, only 25 percent of the survey sample tested 50 or fewer students (Table 22). It is possible, therefore, that insufficient student interest is a larger factor or reason for discontinuance than is shown in the results reported here.

One particularly encouraging sign in Table 26 comes from the finding that close to 18 percent of the overall sample had either (a) elected only to temporarily suspend ASVAB testing (11.6 percent) or (b) already initiated testing again by the time of the survey (6.3 percent). Indeed, a few counselors maintained that their schools never even stopped testing. "Computers sometimes make mistakes," a counselor in California commented. (So do counselors. A follow-up investigation of this particular school showed that it had suspended testing in the 1979-80 school year. It readministered the ASVAB in the 1980-81 school year.) Several schools, it appears, strongly encourage or require combinations of grades to take the test; they then skip a year or several years as part of a planned cycle of testing. One small rural school (enrollment of 320 students), for example, tests all of its students (freshman through senior classes) every three years. Other schools that have mandatory testing of juniors and seniors may administer the test in two-year

cycles. This system allows schools to gain the full value of the ASVAB while freeing them from yearly administrative burdens.

Since the prevailing tendency among counselors was to name just one or two reasons for discontinuance, it is not surprising that these responses reappeared (in approximately the same order of frequency) in the follow-up question on primary reasons for discontinuance. As seen in Table 27, however, there were two notable exceptions. First, the order of response frequency shifted between test usefulness and student interest among rural respondents: over 14 percent of the rural school counselors indicated that insufficient student interest was a primary cause of discontinuance (the same percentage who mentioned this factor in the previous question); yet, while 19 percent of the same counselors selected "test usefulness" as one reason for discontinuance, less than 12 percent considered it to be a primary reason.

A shift in attitudes also occurred with respect to the relative value given to other tests. Overall, close to 5 percent of the respondents mentioned that their school population could be better served by other tests; less than one percent considered this factor to be a primary reason for discontinuance. In contrast, most counselors who indicated that "too much testing" was a cause to stop using the ASVAB also claimed that overtesting was the primary reason for dropping out of the program.

School counselors who identified test administration problems, either school-related or otherwise, on the previous question (Table 26) usually considered these problems to be the primary reason for dropping the ASVAB (Table 27). Two out of five counselors felt that school-related administration problems were the primary reason for discontinuance; another 6 percent of the total sample indicated that "other" test administration problems were responsible.

Table 27

Primary Reasons Given by Schools for Discontinuing Use of the ASVAB by Urban/Rural Classification

Primary Reason for Discontinuing Use of the ASVAB*	Survey Group Response Distribution (Percent) Urban N=70	Rural N=153	Total N=223
School-Related Test Administration Problems	38.6	36.6	37.2
Lack of Sufficient Student Interest	7.1	14.4	12.1
Test is Not Useful for Non-Military Counseling	11.4	11.8	11.7
School Elected to Skip One year or More of ASVAB Testing	8.6	12.4	11.2
Length of Test	4.3	7.8	6.7
Other Test Administration Problems	7.1	5.9	6.3
Too Much Testing	8.6	1.3	3.6
General Experience with the Test Was Unfavorable	1.4	1.3	1.3
School Population is Primarily College-Bound and Other Tests are Better	2.9	0.0	0.9
Parents Objected to use of Military-Sponsored Test	0.0	0.0	0.0
Adverse Publicity about ASVAB	0.0	0.0	0.0
Other/No Response	4.3	2.0	2.7
Does Not Apply; ASVAB Readministered	5.7	6.5	6.3
TOTAL	100.0	100.0	100.0

*Survey Question: "What was your school's primary reason for discontinuing use of the ASVAB?"

No guidance counselor in either the rural or urban sample stated that they dropped the ASVAB primarily because of parental/student objections. In addition, no guidance counselor claimed that "adverse publicity" or specific criticism was a major influencing factor.

Conclusions and Recommendations

Analysis of data on schools that discontinued testing in school year 1979-80 (Table 22) suggests that a lack of student interest (or poor promotion or methods of informing students) may have contributed to the loss of as many as 856 schools (or 38 percent of the total). As previously mentioned, pre-survey interviews confirm that schools with low participation rates tend to stop schoolwide testing. Schools which have moderately high participation rates may even choose to remove the ASVAB from their testing programs--yet encourage students to take the test elsewhere. An example is provided by a school in Oregon. In 1979, about 130 students in the senior class (77 percent of all seniors) at this particular school participated on a semi-mandatory basis (i.e., students were "strongly encouraged" to take the test). In 1980, the school discontinued testing because "too many kids were taking the test." During the 1980-81 school year, the school provided transportation to the local Armed Forces Examining and Entrance Station (AFEES) for about 35-40 students (all seniors) who were interested in military service. (The counselor estimated that fifteen graduating seniors were expected to enlist.)

At the same time, schools that test a large proportion of their students--sometimes entire grades on a mandatory or semi-mandatory basis--may decide to skip a year or two years as part of a planned cycle of testing. There is some evidence to suggest that this is a fairly common practice for schools that administer several other standardized tests. (About 11 percent of the survey sample falls within this category.)

Differences between rural and urban schools were found in the survey responses of guidance counselors. On the average, counselors from urban schools reported fewer reasons for participating in the program and more reasons for dropping the test than did counselors from rural schools. On the other hand, proportionately more counselors from rural schools than from urban schools indicated a desire to cooperate with the military services. This may reflect the fact that, traditionally, the military has received greater support and acceptance in the predominantly rural regions of the nation (especially in the South and Southwest).

By far, the most frequently mentioned "reason" for discontinuance concerned school-related test administration problems. There were also criticisms of test content, test length, and test administration by the government. Problems associated with the test itself generally concerned the view that it is primarily suited for students with average or lower-level abilities; it does not contain enough "academic" elements; and it is not useful enough for non-military counseling purposes. Some counselors complained about methods of reporting results and "interpretability."

The overall analysis of results suggests that the discontinuance problems are not as far-reaching or severe as the numbers might indicate. As previously observed, some schools that are recorded as program drop-outs are actually cyclical testers. Another small proportion of schools are testing again, while others may soon follow. Over 14 percent of the sample had definite plans to use the ASVAB again; another 50 percent expressed the possibility of testing in the future. Furthermore, there is evidence that schools which drop the ASVAB still encourage the testing of their students at military offices and installations.

It does not appear difficult to bring a number of schools back into the high school testing program. For example, several schools that had given the test in previous year(s) on a mandatory basis had never seriously considered the prospect of changing to a voluntary system--instead of stopping entirely--as a way of lessening the school's administrative burden. During the telephone interview several counselors mentioned that they would consider voluntary testing. Other guidance counselors were especially interested in the concept of cyclical testing. Still others were prompted by the telephone calls to "reconsider" using the test once again.

This raises the important point of the need for better communication between the Department of Defense and secondary schools that decide to discontinue ASVAB testing. This can be accomplished, at limited expense, by mailing out soon after their discontinuance a letter of inquiry and a short survey form (with a pre-addressed and franked return envelope) to all schools that drop out of the program. The letter and survey would indicate to the school administrators that the Department of Defense is both aware and concerned about losing the particular school from its testing program. At the same time, the replies to the survey would allow the Department of Defense to "measure the pulse" of the program and to keep in touch with the problems of schools that decide to drop the ASVAB. Further, the use of a written survey instrument would provide school administrators and counselors the opportunity to compose their thoughts and feelings about the program, and to better express their true responses and reactions.

In summary, the results of this exploratory survey of schools that discontinued ASVAB testing do not draw a particularly unfavorable picture of the current program. Better communication, awareness, and response to

particular problems of the schools (especially those concerning the actual administration of the test) appear to be the key elements for reducing program attrition and bringing back schools that have left the program. MEPCOM's pilot test of the establishment of a specialized civilian position for the High School Testing Program in 17 AFEES is likely to be a constructive initiative in this regard.

Chapter 3

SURVEY OF ARMY EDUCATION COORDINATORS

Introduction

The objective of the survey of Army Education Coordinators was to identify actions that could be taken to improve the institutional ASVAB program. The sources of these recommendations are Army educational coordinators (ECs) from 41 of the 59 continental U.S. District Recruiting Commands. Information was collected via telephone interview.

In order to establish a context for recommendations, interviews covered a wide range of EC's perspectives of the institutional ASVAB program in their area. The questions in Appendix B represent the model used in the interviews. The questions were designed to establish the context from which recommendations were received, the specific problems perceived in each district, actions being taken to alleviate those problems, and the ECs' evaluation of the effectiveness of the program in their areas.

The results presented in this chapter encompass two analytic perspectives:

1. Examination of the specific recommendations for changing the program as they were stated by the ECs. In this analysis, suggestions are categorized, counted, and, where applicable, explained or elaborated. An attempt is also made to identify the expected impact or reason for making the recommendations.

2. Analysis of problems, organizational and environmental contexts, and program evaluations to see how they may improve the program. This analysis takes a somewhat broader perspective and examines such factors as the justification for marketing in nonproductive or marginally productive schools, the need to push mandatory testing, and similar system-level considerations.

Changes Suggested by Education Coordinators

Forty-one Education Coordinators[1] identified 106 possible improvements, an average of about 2.5. The improvements were organized into 48 specific categories across 5 dimensions The description of suggested improvements will be presented within the context of these dimensions. The dimensions used for this analysis are: (1) the test itself; (2) administration of the test; (3) promotion of the test; (4) staff; and (5) administration of the overall program.

The Test

There were 14 different suggestions to improve (or change) the ASVAB presented by 41 different ECs.[2] As Table 28 shows, there was no particular regional bias in these suggestions.[3] The most common recommendation was to shorten the test (N=10). The justification was generally that a shorter test would be easier to sell in the schools; in the opinion of the ECs, shortening

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[1]/Actually, 39 education coordinators and 2 Army officers were performing the EC functions; the officers were performing until civilian replacements were found. The respondents were located as follows: Northeast, 11; Southeast, 6; Midwest 10· Southwest, 7; and West, 7. The Navy was also requested for permission to interview its Education Specialists but elected not to participate in the survey.

2/All questions were asked in an open-ended mode; thus our results do not indicate the extent to which other ECs would have agreed with the suggestions reported here. The test length problem, for example, is an area of broad consensus, but not all ECs included it as a specific recommended change. The changes described are those generated purely by the individual ECs.

[3]/The Tables present recommendations as they were given by ECs. We have made no attempt to edit or classify the responses beyond the five basic categories. Factual errors and misinformation represented in the Tables have not been edited out. This approach represents both the specific issues that the ECs see and the level of thinking at which they approach the perceived problems.

Table 28

Suggested Improvements in the ASVAB Test

Recommendation	Region					TOTAL
	Northeast	Southeast	Middle West	Southwest	West	
1) Make test shorter	2	4	3	1	-	10
2) Do not change test so often	-	1	-	-	1	2
3) Provide more sub-scores. Improve interpretability	1	1	-	-	-	2
4) Increase usefulness as vocational tool. Tie results to specific civilian jobs	4	-	2	-	2	8
5) Add an "interest" component to test	-	-	-	1	1	2
6) Make test more broadly relevant--beyond military	-	-	-	-	1	1
7) Remove redundancy in test	-	-	1	-	-	1
8) Improve validity; use "local validation"	1	1	-	1	-	3
9) Combine with other vocational tests. Use only one test (e.g., GATB or DAT)	-	2	1	2	1	6
10) Change the name of the test; get "military" out	1	-	1	1	1	4
11) Add a motor skill component to the test	-	-	1	-	-	1
12) Redesign test in line with Cronbach criticisms	-	-	1	-	-	1
13) Put reading comprehension into high school test	1	1	-	-	-	2
14) Redesign so that "people" believe that ASVAB is a real vocational test	1	-	-	-	-	1
TOTAL						44

the test would counter one of the main reasons used by schools that refuse to permit testing.1/ Those ECs who suggested using a shorter ASVAB usually did not mention the possible counter arguments on the reliability and validity of a shorter instrument.

The second most frequent suggestion (N=8) was that ASVAB's usefulness could be improved if results were more relevant to civilian job counseling. Apparently, many counselors refuse to promote the test because they feel it has little usefulness in counseling high school students beyond military service.

Other related suggestions include making the ASVAB more "broadly relevant" and redesigning the ASVAB to "make people believe" that ASVAB is a "real vocational test." The suggestions to do more extensive validation, especially validation focused on local job relevance, also fits into this approach to change the test.

The ECs, who generally believe that more testing is better, also think that establishing the linkage between ASVAB and civilian jobs would greatly increase the support of counselors. Most ECs think that the majority of schools and counselors in their area permit testing because they feel a general obligation to cooperate with the military services, not because the results are useful for counseling purposes.2/

The third most frequently recommended change (N=6) was the elimination of the ASVAB and the substitution of a general vocational aptitude test, such as the General Aptitude Test Battery or the Differential Aptitude Test. The

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1/In the survey of schools that discontinued testing, length of the test was given as a primary reason for discontinuance by a relatively small proportion (6.7%) of the counselors.

2/The exceptions occur largely in the southeast region and in districts with a large proportion of small rural schools. The primary reason for the exceptions seems to be money, i.e., these schools cannot afford other tests.

logic of this argument was similar to the argument for increasing the civilian "usefulness" of the ASVAB--that is, a single broadly applicable test would attract more students and counselors.

The assumptions underlying the two preceding suggestions were that (1) if counselors thought the test were useful for more than military service, they would be more likely to adopt it for their schools; (2) greater interest by counselors would increase the likelihood of mandatory testing; and (3) greater counselor interest would lead to better promotion within schools, and therefore, more students taking the test. This logic was dominant among most of the ECs interviewed. It was predicated on the further belief that many enlistments were obtained from among test takers who were "undecided" about their future military plans. Increasing the size of the group could then lead to more enlistments.1/

Of the remaining recommendations, two addressed the issue of increasing the comprehensiveness of the ASVAB. One EC suggested adding a motor skill component and two wanted the reading comprehension section of the version of the ASVAB given at Armed Forces Examining Stations included in the high school test. The former recommendation was based on the ECs' perceived need for broader measurement in both civilian and military realms. The latter recommendation was offered because of "requests" from school counselors.

Administration of the Test

Table 29 shows recommendations for changes in the administration of the test. Included in this category are the process of scheduling schools, administering the tests, and effecting agency coordination. The change most often

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1/Beliefs about the value of approaching the undecided groups were not universally held. In addition, many of the ECs did not think the high school ASVAB program produced a significant number of unique contacts or enlistments who would not have made contact with a recruiter in any other way; thus, sometimes the logic of the suggested changes and the beliefs about the role of the high school ASVAB were contradictory.

Table 29

Suggested Improvements in the Administration of the ASVAB Tests

Recommendation	Region					Total
	Northeast	Southeast	Middle West	Southwest	West	
1) Central control within the DRC (putting scheduling, testing, promoting, etc. together)	3	-	4	2	1	10
2) Improve school involvement; get counselors to help	-	-	1	-	-	1
3) Provide more immediate, direct feedback to schools	1	-	-	1	-	2
4) Do not have military testers or proctors	-	-	-	1	-	1
5) More testers/NCO testers in each area	-	-	3	-	-	3
6) Let schools test; mail test to schools	1	-	-	1	-	2
7) Emphasize assisting schools	-	-	-	-	1	1
8) Allow split testing session	-	1	-	-	-	1
9) Do not test freshmen	1	-	-	-	-	1
TOTAL						22

suggested was the centralization of DRC-level coordination and administration in one office or individual. For most ECs, this meant installing an ASVAB officer at the AFEES and making that person responsible for getting school cooperation, scheduling tests, scheduling and controlling test administrators, promoting tests within schools, and acting as a problem-clearing point. The basis for this recommendation was varied. Some ECs saw recruiters as ineffective at scheduling and promotion. Others pointed to coordination (scheduling tests getting testers to the right location on time, etc.) problems as the major issue. There are also related problems of authority over individuals working for different offices. Still others pointed to the difficulties in arranging higher-level assistance at difficult schools or at higher administrative levels.

Generally, the ten ECs who recommended such a change had strongly held views; however, other ECs, while recognizing possible benefits from such a consolidation of authority, also saw possible negative consequences. The most important of these was the possible removal of many recruiters from the schools where ECs felt they were needed.1/ In some instances, the ASVAB is the only basis on which schools will permit entry of recruiters. In some DRCs, the scheduling process was more centralized. For example, the AFEES sent solicitation letters or the EC scheduled all schools, reducing the perceived need for further centralization.

1/ECs also reported that recruiters were divided on this issue Some recruiters needed the assistance of the high school testing program in gaining access to schools; others, who could obtain other lists, were less enthusiastic and provided much less active support to the program, according to the ECs.

Other recommendations in this area were less widely held and more focused. Three ECs suggested increases in test administrators and/or control personnel. Two thought that allowing schools to administer their own tests would reduce coordination problems and increase cooperation. One EC suggested split sessions to alleviate the problem of test length. All of these recommendations are essentially logistical in their focus, although all have the intent of increasing school cooperation. Two ECs thought that improving the speed with which scores are returned would help counselors and increase cooperation and one offered the more general comment that more assistance should be given to schools.

Finally, one EC suggested that uniformed Army personnel not participate in the testing process. This recommendation is similar in its motivation to the suggestion by three ECs that DoD references be removed from the title of the test as well. Some ECs feel that it is not the test, but its explicit association with the military, that creates cooperation problems for both counselors and students.

Promotion of the ASVAB

Education coordinators identified fifteen separate, but not necessarily independent, ways to improve the promotion of the ASVAB high school testing program. As Table 30 indicates, references to ASVAB promotion differ from suggestions about the test and test administration in that no suggestion is selected by a large proportion of the ECs. The largest number of ECs, four, recommended a manual for counselors to use in career counseling programs and an increase in school and student oriented advertising.

Table 30

Suggested Improvements in Test Promotion

Recommendation	Region					TOTAL
	Northeast	Southeast	Middle West	Southwest	West	
1) Bigger effort to get educators to AFEES on educational tours, etc.	-	-	1	-	-	1
2) Pay school to test (e.g., $3 per test)	-	-	-	1	-	1
3) MEPCOM get materials to ORC on time	1	-	1	-	1	3
4) National advertisement of ASVAB as vocational test for awareness of parents and students (not military)	-	-	-	1	2	3
5) Sell vocational instructors instead of counselors	-	-	-	-	1	1
6) Manual for counselors with career program orientation	2	-	2	-	-	4
7) Publish academically-oriented supportive research	1	-	-	-	1	2
8) Work through national organization (e.g., PTA)	1	-	-	-	-	1
9) Press mandatory testing	-	1	-	-	-	1
10) Develop standard presentation for use in field and for promoting test	1	1	-	-	-	2
11) Develop better sales pitch; emphasize selling of ASVAB program	1	-	1	-	1	3
12) Work with political figures (Congressmen, legislators, etc.)	2	-	-	-	-	2
13) More advertisement in schools	3	-	1	-	-	4
14) Avoid parental consent	1	-	-	-	-	1
15) Spend more time with the test-taking population	1	-	-	-	-	1
TOTAL						28

Besides the counselor's manual, two other suggestions are oriented toward counselors and the crucial role they play in ASVAB promotion within schools. They are (1) direct promotional efforts at vocational teachers because they are often a more important influence on students who would likely benefit from taking the ASVAB; and (2) more scholarly articles in counseling oriented publications on such subjects as validation.

Increased advertisement at the national level was suggested by three additional ECs. A total of nine ECs thus favored some kind of increased advertising or publicity. All but two of these wanted the ASVAB program advertising aimed at parents and students primarily to increase awareness of the test and what it could do beyond its use in recruiting.

One EC took a more direct approach, suggesting that schools be paid for each student tested. The specific suggestion called for a $3 per student fee. This, he thought, would increase the likelihood of internal promotion, especially in financially tight periods such as those being experienced by many schools now.1/ Disregarding the potential conflict of interest, the argument supporting this approach was based on the possible identification of many additional "undecided" students.

Using another approach, five ECs suggested developmental efforts to improve marketing the ASVAB in the schools. One suggestion was for a standardized presentation on ASVAB and for the promotion of ASVAB. The second recommended a "slicker sales pitch" be developed. Both were very general and did not offer specific suggestions for what such a presentation should contain or how sales techniques could be improved. The suggestions do, however,

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1/The economic situation is one of the main factors cited by ECs as contributing to some increases in high school participation in the ASVAB program in order to take advantage of free test services. This incentive is apparently particularly important for smaller (and poorer) rural schools.

indicate an awareness of a problem in this area. Other indicators of the same problem expressed by ECs are the variety of approaches used by the DRCs and the varying techniques and interest levels of recruiters who are still the primary "sales personnel" for the program.

Finally, three ECs addressed the level at which promotional efforts should be directed. One suggested national organizations such as the PTA, and the other two recommended focusing on political targets like state legislatures or Congress. Their objective was to obtain some kind of general support or recommendation for mandatory testing. Interestingly, several other ECs thought that these efforts would be wasted and that the focus should be at the individual school level. The differences among ECs on this issue were largely related to the specific state in which they worked. Those individuals working in states with privacy problems or where privacy legislation was pending were more likely to mention political actions.

Staffing for the Administration of ASVAB

Some of the recommendations described in the previous tables have staffing implications, such as having more testers, but there were also three direct references to the need for resolution of staffing problems in the institutional ASVAB program (Table 31). The first was for better training of the recruiters who are the primary staff for promotion. The problem highlighted in this suggestion was the recruiters' inability to effectively discuss ASVAB problems with potential participant school counselors. The second recommendation was for more people to sell the program and educate relevant publics. The final recommendation was for the hiring of "specialists" to sell the schools on participation and promote the test to increase student participation. All of these suggestions seem to imply the same general problem: the current staff, primarily recruiters, does not have the knowledge,

experience, or expertise to successfully sell and promote the ASVAB program in high schools. The fact that only 7 of the 41 ECs interviewed suggested these changes indicated that (1) the perceived problem may not be applicable in all areas; (2) recruiters have varying roles across DRCs; and (3) there is substantial variation in the quality and quantity of support that recruiters supply to the high school ASVAB program.1/

General Program Administration

There were five suggestions for changes in general program administration, each presented by only one EC (Table 32). Most of these recommendations are related to earlier suggestions. While only one EC made a specific recommendation on each of these items, a number of others mentioned the item as a

Table 31

Staff Oriented Improvements

Recommendation	Region					Total
	Northeast	Southeast	Middle West	Southwest	West	
1) Better training on ASVAB for recruiter	-	-	2	-	1	3
2) Provide more people to sell and educate the public about the program	-	-	1	-	1	2
3) Provide specialists to sell to schools and publicize test	-	-	1	-	1	2
TOTAL						7

1/Quantity and quality are a function of ability to do the work, willingness to do the work, or both. Unwillingness, according to ECs, may result from fear of working in high schools, lack of belief in the high school ASVAB program, and reliance on other approaches to get enlistees, among other factors. Also, older, more experienced recruiters are less likely to support the program than younger, more recently trained recruiters.

problem.1/ The primary example of this situation is the first recommendation presented in Table 32, "placing less emphasis on unproductive schools." Several ECs felt that school quotas and general policy focused too much on schools that were never likely to cooperate or, even if they did cooperate, would not produce sufficient new enlistments to warrant the extensive effort required. The quota demands, however, force ECs, recruiters, and others to expend time and effort with little probability for payoff. This problem implies a specific solution that would somehow purge such schools from the lists of schools to be contacted.

Table 32

Suggested Improvements in the General Administration of the Program

Recommendation	Region					Total
	Northeast	Southeast	Middle West	Southwest	West	
1) Less emphasis on unproductive schools	1	-	-	-	-	1
2) Less emphasis on numbers (focus on those who are interested)	-	-	1	-	-	1
3) Less time on state and country officials; more time locally	-	-	-	1	-	1
4) MEPCOM should be more oriented toward selling	-	-	-	1	-	1
5) Develop closer linkage between the test and the service school	-	1	-	-	-	1
TOTAL						5

1/The "problems" are discussed in greater detail in the following section.

In a related recommendation, one EC suggested less emphasis on numbers of students tested and more concern with those "really interested" in the Army. This approach contradicts the evaluation of other ECs who say that identifying the undecided students and even some students negative to the Army can have a long-term payoff in enlistments.

The remaining three recommendations are not specific enough to suggest a particular action. The recommendations that MEPCOM should be more oriented toward selling and that the test should be linked more closely to service schools are consistent with suggestions made in other contexts. The recommendation to spend less time on state and county officials, however, contradicts several other suggestions made by the ECs.

The Effect of Region and Beliefs about ASVAB on Recommendations

If one examines Tables 28 through 32 from the perspective of the region in which recommendations were generated, one main difference is immediately evident. Education Coordinators in the southeastern region are much more likely to suggest changes in the test itself (Table 28) than are the ECs in the other areas. Of 14 recommendations made by ECs in the southeastern area, 9 are related to the ASVAB itself. Of the remaining 5 recommendations, 3 focus on the convenience of the schools or usefulness of the test. Only 1 concerns marketing the ASVAB to schools. The reason for the difference between southeastern ECs (including to some extent southwestern region ECs) seems to be mainly a result of the ease with which cooperation is obtained in southeastern high schools in comparison to other regions of the country. Typically, the southeastern DRCs have little difficulty in gaining school cooperation and obtaining mandatory testing compared to DRCs in other areas. The ECs believe that the feeling of obligation to support the military is

simply higher in the south and in part of the southwestern region as well. In other areas, where resistance is higher and more complex, ECs were more likely to present a variety of recommendations for change. This outcome is certainly not startling, but it does suggest that a policy change need not be applied throughout the system to have a desirable effect.

Comparison of the Views of Education Coordinators with the Views of Counselors in Schools that Discontinued Testing

It would be difficult to integrate or collate the findings of the survey of counselors, discussed in Chapter 2, and the survey of Education Coordinators. The purposes of the two surveys were different. The purpose of the counselor survey was to identify reasons for the discontinuance of testing in order to assist in understanding the reasons for the decline in the number of schools and students that were tested. The objective of the survey of Education Coordinators was to obtain suggestions for improvement of the program. In this section the views of counselors and the views of Education Coordinators are compared in a general way but it is not practical to perform a comparitive quantitative analysis of the two surveys.

In terms of their general perceptions of the importance of key elements of the program, the observations of the Education Coordinators are consistent with the views of the counselors that are discussed in Chapter 2. Some of the specific suggestions of the ECs coincide with the views of only a minority of the counselors but in only a few instances were their views entirely inconsistent.

Both the ECs and counselors, in varying degrees, stress the following as key elements of the high school testing program:

1. making the test more relevant to civilian counseling.
2. the provision of free test services.
3. the disposition of counselors and other school officials to cooperate with the military services.

In terms of specific suggestions, the Education Coordinators attached more importance to shortening the test than did the counselors and more often mentioned substitution of a commercial test, such as the Differential Aptitude Test or the General Aptitude Test Battery, for the ASVAB.

As might be expected, counselors placed more emphasis on internal problems of test administration, including scheduling the test, conflicting demands for student time, and physical space for administering the test. Most of the ECs who had suggestions about test administration discussed the general problem of administering the test program at the DRC-AFEES level. In their view designation of a single individual to have staff responsibility for the program at the DRC-AFEES level would improve the local management, administration, and control of the program.

Program Changes Inferred from Perceived Problems and General Performance of the High School ASVAB Program

Analysis was focused on the relationship of the EC's perceptions and their recommendations. The primary interest in this analysis was to determine if these perceptions created a bias in the type of recommendations offered. Our finding was that neither perception of success nor whether the EC liked the program seemed to influence the choice of suggested changes. Thirteen of the ECs thought the program was definitely effective; nine thought it was somewhat effective; and ten did not feel that it was effective at all.

Of those who expressed an opinion, almost all liked the idea of the program and thought the test itself was satisfactory, although not beyond the need for change. The recommendations, however, seemed to be based more on the specific problems in the DRC than on an evaluation of effectiveness. The identified problems and some changes that they imply are discussed in this section of the report.

In addition to the specific recommendations the survey identified perceived problems in the ASVAB program and examined general performance of the program. Often the problem areas were not the issues addressed in recommendations. Similarly, general system performance was not the perspective taken by most ECs in answering the survey questions. In some instances, however, it was possible to examine responses across all respondents and observe common elements that implied particular policy changes or emphasis.

Problem Areas

Table 33 contains a catalogue of 27 specific problem types as they were identified by ECs. The problems were divided into 10 categories. Some of the categories correspond to those used in Tables 28 through 32, but others are directed at problems rather than solutions. In this section the focus is on those problems which were not directly addressed by recommendations previously described.

Problems caused by test length and the validity issues raised by Cronbach and others (category 1) were widely cited and addressed in the recommendations. The administration problems (category 2) cited were most directly addressed with the suggestion that ASVAB administration, scheduling, and promotion be placed under centralized control. Several ECs thought that this type of management system would help alleviate problems of poor

Table 33

Perceived Problems in the ASVAB by Region

Recommendation	Region Northeast	Southeast	Middle West	Southwest	West	TOTAL
1) a. Test length	3	3	1	-	-	7
b. Cronbach criticism.	1	-	3	1	-	5
2) Administration problems:						
a. School's bad experience with previous administration - tester not show, etc.	1	1	2	1	-	5
b. Lack of cooperation from AFEES, OPM, etc.	-	-	3	-	-	3
c. Cheating on test	-	-	1	-	-	1
d. Too much "paperwork"	-	-	1	-	-	1
3) School-related problems:						
a. Counselors too busy, heavy workload	2	-	1	-	-	3
b. Counselors do not find it useful for civilian counseling	3	2	3	1	4	13
c. Counselors do not use because cannot interpret	1	-	-	1	3	5
d. Schools already over-tested, no time to test	1	-	1	1	1	4
e. School is a poor test setting - too many diversions, too much interference, etc.	-	1	-	-	-	1
4) Privacy - Mosher investigation, parents complain about recruiter contact	2	1	3	1	2	9
5) Promotional materials often late	1	-	-	-	-	1
6) Attitudes - Anti-military, anti-war attitudes of counselors and administrators (Vietnam carryover)	2	-	2	1	3	8
7) Acceptance:						
a. Commanders not believe in ASVAB	1	-	-	-	-	1
b. Recruiters not believe in ASVAB*	-	-	1	-	-	1
8) Lack of effort by:						
a Area commanders	1	-	-	-	-	1
b. Recruiters - not use leads, not promote	2	-	2	1	2	7
c. Recruiters afraid of schools	2	-	2	-	1	5
d. Other services not support program	-	2	3	2	-	7
9) Use of lists:						
a. Time lag of enlistments make lists less relevant for recruiter	-	-	-	-	1	1
b. Sharing lists with others	1	-	1	-	1	3
c. ASVAB can hurt other types of school contracts	1	-	-	-	-	1
10) Other miscellaneous problems:						
a. Recruiter not trained on ASVAB	-	1	3	-	-	4
b. GED test taker require higher score	-	-	-	1	-	1
c. Competition from other tests	1	1	1	-	-	3
TOTAL						102

*In almost all ORC the EC indicated that recruiters were mixed in their acceptance of the High School ASVAB program.

93

tester/school coordination; increase control of testers; reduce conflicts between OPM, the AFEES, and the IRC; and reduce paperwork.[1]/

The third category concerns school-related problems, including those regarding use of the test. This category includes the counselors' complaint that the ASVAB is not useful for civilian job counseling (the most commonly cited problem, N=13) and that counselors do not know how to interpret the results of the test. Recommendations to increase civilian applicability of the test and the availability of interpretative information address these problems. A group of problems that includes lack of counselor time, over-testing, and college orientation of the school, has not been directly addressed by recomendations. These problems are environmental obstacles and their solution would require a substantial change in attitude about either the value of the ASVAB for all students or the need to permit the military its "day in school".[2]/ The issue of civilian usefulness of the test seems to be a matter of validation and possibly of restructuring the test.

Eight ECs identified specific attitudinal problems (category 6). The residue of the Vietnam era anti-war, anti-military attitudes is still present in many of the people who make decisions about ASVAB testing. As long as this negative view remains, it will be difficult or impossible to use a direct approach to getting the ASVAB into some schools. A few ECs suggested appeals to higher levels or broader constituencies as a means to overcome these problems; others saw such appeals, when made as a direct result of refusals

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[1]/The expanded test of centralized marketing by MEPCOM personnel in 17 DRCs will enable a more comprehensive evaluation of centralized marketing.

[2]/The counselors' limited time availability and overtesting are typical excuses for refusing to give the ASVAB. It was unclear to many ECs whether these were always the "real" reasons for denying entry to military testing.

from counselors or principals, as creating ...e animosity and seldom producing changes in decisions.

Another type of attitude problem was perceived among military personnel. One dimension of this problem is acceptance of ASVAB by recruiting commanders and recruiters. Although each group was perceived as an obstacle by only one EC (category 7), there were other references to the level of support provided, particularly by recruiters (category 8). In most DRCs, many recruiters were perceived as not supporting the High School Testing Program. Probably the most common reason suggested by the ECs was the perceived failure of the program to pay off in enlistments. There are long delays in obtaining enlistments and it is often possible to obtain lists of seniors through other means (category 9a).1/

A second dimension of the problem of acceptance of the program reflects the shortcomings of recruiters who do not want to approach high school officials (category 8c). This individual problem, which is widely mentioned by ECs, is manifested in lack of effort and negative attitudes. Both the availability of alternative sources of prospect names and fear of the high school environment seem more likely to occur among older (more experienced) recruiters according to comments made by ECs.2/

1/The most common counter argument offered by ECs was the payoff in "quality" prospects. Many thought that the identification of high quality prospects was the primary benefit gained from the high school program.

2/Alternative prospects are available because older recruiters have had a greater opportunity to establish their own sources; anxiety about contacting the school occurs because older recruiters may have a lower level of education.

The third dimension of the attitude problem is the support provided by the other services (category 8d). Most ECs feel that the other services do not push ASVAB as hard as the Army. The Navy achieves parity in some DRC, but the Air Force and the Marine Corps are not viewed as "pulling their weight" on ASVAB. This situation creates resentment among some recruiters who feel that the Army should get the ASVAB list first for those schools where it does the work of scheduling and promotion (category 9b).

Most of the problems cited by ECs are derived from their perceptions that school officials believe the ASVAB has limited usefulness for civilian counseling. In all regions but the Southeast (and some districts in the Southwest), this feeling seems to be pervasive. The "patriotic" basis for cooperation in the South does not provide support for the program in other parts of the country. According to many ECs, a perception that the test is useful for civilian counseling would increase support for the program.

Conclusions and Recommendations of Education Coordinators

There are several areas in which general policies on the high school ASVAB program generate problems or conflicts that might be resolved by general policy changes. In this section three of these areas are discussed. In some instances, the issues raised will relate to specific problems and recommendations already discussed. The objective of this section of the chapter is primarily to expand the discussion of changes suggested by the ECs.

1. Focus on Productive Schools

The ECs interviewed for this study suggest a variety of differences in the types of schools likely to participate. For example, rural schools are more likely to participate than urban schools; schools in upper-class neighborhoods are less likely to participate; and parochial schools are less likely.

In addition, education coordinators, recruiters, and other recruiting personnel with extensive experience in each area suggest that not all schools are equally productive--that is, not all schools are likely to produce an equal, or even proportional, number of enlistees. Imposed on this set of differences is a uniform policy (as perceived by the ECs) that demands efforts to obtain the cooperation of and promote the ASVAB in all eligible schools. These demands result in drains of time, money and effort of recruiting personnel that they often feel are unproductive because they do not produce a significant number of enlistments.

In the light of these perceptions, many of the ECs implied that a change in policy which allows recruiting personnel to focus only on schools with a high payoff would be welcomed. Such a policy would rely on the expertise of local people to identify the appropriate deletions from current school lists. It would also require a continuous screening of participant and nonparticipant schools to identify factors that might require a change in status. Potential outcomes include increased output from tested schools because of more intense efforts and/or more time to pursue recruiting approaches with higher payoff probabilities.

2. Increase Applicability for Civilian Counseling

ECs cite the low level of applicability of the test for civilian job counseling as one of the major reasons for nonparticipation in the program. Many ECs therefore recommend increasing the civilian applicability of the test.1/ To achieve the applicability many ECs desire could require changes in both the test and the policies under which it operates. Such an extension in

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1/In the survey of secondary schools (Chapter 2) the second most frequently mentioned reason for discontinued testing (21.1 percent of sample) was "test is not useful for non military counseling."

scope could also have the effect of creating new problems of cooperation because (1) the test could be longer; (2) the demands on the support system could increase; and (3) there would be more direct competition with private tests or other general tests, such as the GATB. If, as many ECs argued, the enlistment payoff in quality "undecided" seniors is the biggest benefit of high school testing, then a program change which identifies more of this group would certainly be desirable.

3. Provide Centralized Staff at Recruiting District - Armed Forces Examining Station Level

The recommendation to centralize the conduct of the high school testing program at the DRC level has been discussed earlier. At this point other implications of possible changes in the direction of centralized control will be discussed. One of the disadvantages of the current system, as seen by ECs, is that recruiters are inappropriate agents for both scheduling and promoting functions. They are said to lack information, to be unwilling to interact with high school officials, to have too many other responsibilities, and to be inadequately trained. Such negative characteristics would be especially serious when the schools are reluctant to participate or willing to do only the bare minimum in promotional support, particularly in those schools where the perceived potential for gain is largest. Such problems are balanced against a perceived need by the ECs to "get recruiters into high schools" and the fact that the ASVAB program is the major way that some schools will cooperate with recruiters.

Some recruiters resent the ASVAB program because it interferes with their current interaction with school officials. The recruiter may already be obtaining lists of the names and addresses of seniors or other information that in his/her view reduce the necessity for ASVAB-supplied names and

scores. This is especially true for small schools, where a list of seniors is much easier to handle. The Army recruiter's exclusive contact may also reduce his desire to share lists with the other services.

It was argued by some ECs that the high school ASVAB program created problems for recruiters because its long-term impact conflicted with the short-term obligations of the recruiters to meet recruiting quotas. The tests often take place months before seniors are ready to enlist. Junior testing is even further from the recruiters' immediate objectives. When coupled with the argument that the direct linkage between taking the high school ASVAB and enlistment is uncertain, the skeptism that ECs perceive among recruiters is not difficult to understand.

Those ECs who favor centralized scheduling believe that it would increase the number of schools that participate in the program. Others believe that the quality of the school contact might be reduced, thus decreasing the total number of students tested. If promotional work were done by "professionals," this objection would be overcome.

The current MEPCOM test of centralized marketing is likely to provide more definitive information on the benefits of designating one professional person as having staff responsibility for management of the program at DRC-AFEES level.

Chapter 4

USE OF COMMERCIAL TEST DATA TO SUPPLEMENT THE ASVAB

Background

The decline in the number of schools tested and the number of students tested--resulting partially from perceptions by some schools that the ASVAB was a "military test" and thus lacking in value for civilian guidance purposes--has given impetus to the search for a new approach that would provide access to the larger group of high school students not now reached by the ASVAB program.

A wide variety of psychological test data on large numbers of high school students are currently obtained through commercial testing organizations. Acquisition of this information by Defense would allow military recruiters to contact high school students selectively and to inform them of Defense programs that could be of special interest. The possibility of Defense using commercial test data for this purpose is not a new concept. Major General William L. Mundie, former commander of Army Recruiting Command, had earlier suggested a pilot study involving Defense subsidization of the Differential Aptitude Test (DAT) to increase recruiter access to students. This recommendation led to the investigation described in this chapter.

The purpose of this phase of the study was to identify and evaluate commercial test data that would supplement the recruiting value of the DoD High School Testing Program. This included (1) identifying the various types of test data collected nationally by testing organizations that had potential utility to Defense, (2) determining the numbers and characteristics of

students involved, (3) evaluating the appropriateness or usefulness to Defense of the data, and (4) determining whether Defense could obtain and use the information in recruiting. Some important elements that also needed to be addressed included determining the potential effects on the DoD ASVAB program of using various commercial tests as well as their acceptability to schools, students, and parents.

Feasibility of Obtaining the Results of Commercial Tests

One major component of the study was to evaluate major commercial testing programs in terms of their potential value for Defense enlisted recruitment. Accordingly, discussions were held with testing companies offering interest, achievement, and ability tests to high school students on a national basis. Many of the organizations that were contacted did not want to have their programs associated directly with Defense recruiting, and this factor quickly limited the number of testing programs to be evaluated for Defense use. Other major considerations included (1) the capability of the testing program to provide ability estimates for military selection, (2) its popularity as evidenced by high school use, and (3) the extent to which student records were automated for data retrieval purposes.

Largely based on these criteria, four testing programs were identified for more complete evaluation. Two of them, Psychological Corporation's Differential Aptitude Test (DAT) and the American College Testing (ACT) Career Planning Program (CPP), were used for career guidance purposes and therefore were vocationally oriented. The other two, the Scholastic Aptitude Test (SAT) and the ACT Assessment programs, were used primarily for college placement. Brief descriptions of the testing programs and the ASVAB are summarized in the table below.

DESCRIPTION OF TESTING PROGRAMS

CHARACTERISTIC	TESTING PROGRAMS				
	SAT	ACT	DAT	CPP	ASVAB
CONTROLLING ORGANIZATION	ETS AND COLLEGE BOARD	AMERICAN COLLEGE TESTING	PSYCHO-LOGICAL CORPORA-TION	AMERICAN COLLEGE TESTING	DEFENSE
NUMBER 11th/12th GRADERS TESTED ANNUALLY	2.8M	1.0M	.2M	.2M	.7M
SCHOLASTIC APTITUDE	YES	YES	PARTIAL	PARTIAL	NO
VOCATIONAL APTITUDE	NO	NO	YES	YES	YES
HIGH SCHOOL SUBJECTS, GRADES, ACTIVITIES	YES	YES	NO	YES	NO
EDUC/VOCAT. OBJECTIVES	YES	YES	OPTIONAL	YES	NO
DEMOGRAPHIC/ FINANCIAL	YES	YES	NO	PARTIAL	NO
INTEREST TEST	NO	YES	OPTIONAL	YES	NO
SEARCH SERVICE PROGRAM	YES	YES	NO	PARTIAL	PARTIAL

It was not possible to determine the full extent of high school testing for vocational guidance and/or college placement, since the overlap among testing programs was not known. Information was available, however, showing that during the 1979-80 school year about the following number of high school students were tested as either juniors or seniors:

College Placement

SAT/PSAT - 2,300,000

ACT - 1,000,000

Career Guidance

ASVAB - 700,000

CPP - 200,000

DAT - 200,000

There were about 3 million high school graduates during the 1979-80 school year with approximately half going to college. The Educational Testing Service (ETS) believes that the SAT was administered to most of these college-bound students, and that there was about a 60-70 percent overlap with the ACT Assessment Program. Neither the overlap between the ASVAB, CPP, and DAT, nor the overlap between all these measures and the SAT and ACT Assessment, could be reliably estimated at this time.

The DAT and CPP testing programs were developed to serve career guidance rather than college placement purposes and were therefore more vocationally oriented than the ACT Assessment and SAT programs. A somewhat higher proportion of high school students taking these tests entered the work force or received job-related training after graduation than was true for those taking college placement tests. Both the DAT and CPP programs offered vocational interest measurement as well as aptitude testing, and individualized interpretation of testing results were provided to students and high school

counselors. Unlike the college placement tests, students did not have to pay to take the DAT and CPP.

The CPP program was modeled to a large extent on the ACT Assessment program but largely targeted to high school juniors. Self-descriptive and student profile information was obtained, a centralized scoring facility was used, and individual data records were maintained in a fully automated system. ACT has had increasing success in marketing the CPP by identifying community and junior college "sponsors" who pay for CPP high school testing in their geographic areas so that they can have access to student records (on a voluntary basis) for college recruitment purposes. Under these conditions, the sponsors had proprietary rights over the student test records they subsidized.

The current DAT program differed from the CPP in a number of respects. It was more often administered in the lower high school grades where the scores were used for early educational/vocational guidance. Also, not all individual records were centrally scored. The DAT, when used in conjunction with its companion interest measure, the Career Planning Questionnaire, also took somewhat longer to administer than the CPP. Both test batteries, however, could be sectioned and testing accomplished in a number of short sessions spread over time. The DAT made use of a reusable test booklet so that its overall cost was somewhat lower than the CPP.

Both the ACT and the Psychological Corporation organizations, which market the CPP and the DAT, were very much interested in Defense sponsorship and subsidization of their testing programs in the high schools. They recognized that there were many high schools where ASVAB usage was low and that ACT and DAT records for students in these schools could be useful to Defense in developing additional recruiter/student contacts. Each organization was willing to enter into contractual arrangements with Defense to develop a

program that would serve the needs of high school students and the schools. Since there were many schools lacking funds to buy commercial tests for guidance use, Defense subsidization of these tests was considered to meet an important need.

It was expected that schools participating in the program would probably seek to have the maximum number of students tested, and this made it even more important that provisions be made to keep release of individual testing information to Defense a voluntary matter. It was also considered that some students who might not want to be contacted directly by Defense could be interested in receiving information on Defense programs indirectly through the testing companies. For these reasons, special student release items would have to be developed and included in the testing programs. These items would take into account the voluntary nature of the testing programs and, at the same time, attempt to increase the number of students who could be contacted overall.

In respect to college placement tests, the ACT Assessment and SAT programs were found to be not only sizable in terms of the numbers of students for whom test scores were available, but their automated individual records were also extensive and contained a wide variety of information useful for college recruitment as well as for college placement. In addition to aptitude test scores and high school grades and experiences, demographic data were also obtained along with academic interests and plans.

These types of data provided the basis for "student search service" programs. These programs allowed colleges and certain other organizations to contact for recruitment and scholarship purposes those high school students who signed a statement expressing willingness to participate in the search service. The colleges and other users of the search service paid for the

opportunity to obtain names and addresses of high school juniors and seniors selected on the basis of such criteria as scholastic aptitude, high school achievement, race, socioeconomic levels, and/or other types of individual information available in the ACT assessment or SAT data files.

The Department of Defense and the Military Services have been given access to ACT Assessment and SAT student search services in contacting high school graduates for ROTC scholarships and in recruiting for the military academies. However, neither the College Board, which controls SAT records, not ACT previously permitted Defense organizations to use their student search services for enlisted recruitment programs.

Potential Utility of Commercial Test Information

It became evident that Defense could develop arrangements with a number of major testing companies that would provide new and potentially valuable information to supplement the ASVAB program for military recruitment. This information could serve the following purposes and objectives:

1. Identify more qualified high schools than now accomplished under the current testing program.
2. Provide "propensity to enlist" scores from the self-descriptive data in the test records and thus provide target groups for selective recruitment.
3. Permit personalization of recruitment appeals so that Defense offerings and incentives could be directed to meet individual needs and objectives.

There were significant differences in the types of Defense-related programs that would evolve through the use of ACT Assessment and SAT search

service systems as compared with Defense-subsidized DAT and CPP testing. Defense access to students taking the ACT Assessment and SAT would have to start with a direct mail approach. Defense would identify specific groups of students to be contacted, and the testing companies would mail out personalized letters and brochures describing relevant Defense programs. Interested students could then be contacted directly by military recruiters. In contrast, the CPP and DAT programs would provide direct access by recruiters to test records for those students willing to be contacted personally, and permit mailout of personalized Defense recruiting materials to many of the students not willing to be contacted directly by Service recruiters. An evaluation of the utility of each of the testing programs is provided below.

The CPP Program

About 200,000 high school juniors and seniors participate in the ACT's CPP program each year, and the program has an excellent reputation with many school administrators throughout the country. The CPP program is officially recommended for use as a guidance test by a number of states. The CPP growth rate of about ten percent per year has been slowed by the apparent inability of many high schools to meet testing costs of about $4.50 per student. It is primarily for this reason that ACT has been actively seeking sponsors such as community colleges to fund the program. The test has been modeled to some extent on the ACT Assessment. It is well-designed and the test record includes important information on student abilities and achievements, needs and interests, biographical information, and other details useful for vocational and educational guidance purposes. ACT has developed an attractive student report to provide this information to students and counselors (see Appendix C). It has also been one of the unique features of the CPP that a

high school or test sponsor can develop up to 12 questions to be included in the test administration with student responses becoming part of the student's automated record.

It was important to determine the relationship between CPP scores and the AFQT. Although CPP scores were not expected to be used for selection purposes, they could have utility as an initial screen for general military ability level. Accordingly, ASVAB AFQT scores from the DoD High School Testing Program were matched with CPP scores for 5,000 high school students tested in six states with both instruments. The obtained multiple correlation coefficient of .85 between CPP scores and the AFQT was sufficiently high to permit use of the CPP in screening for military aptitude level.

The feasibility of Defense subsidization of the CPP program was evaluated in a pilot test conducted in Sacramento, California high schools during May 1981. Testing arrangements were made by ACT, and over 1,240 juniors and seniors in three high schools participated in the study. As part of the CPP testing, students were asked to respond to 12 questionnaire items designed specifically for Defense purposes. Major findings from this study are provided below. The statistical results are shown in Appendix D.

One of the key issues addressed in the Sacramento study was the willingness of high school students to have ACT turn over their CPP records to Defense for direct recruiting contacts. The study showed that about 27 percent of the students tested were willing to do so, and another 33 percent were willing to be contacted through ACT as an intermediary. Results varied somewhat by grade level and sex. Male juniors were the most responsive group with over 35 percent agreeable to direct contact and an additional 29 percent to indirect contact through ACT.

A number of comparisons were made between students willing to be contacted directly by Defense and those who showed no interest in either direct or indirect contact. While no significant differences were found in respect to ability levels, the direct contact group had a higher degree of interest in each of the vocational areas covered by the CPP. There were other differences as well. The direct contact group indicated a greater need for help in going to college in respect to such concerns as financial assistance, finding employment, choosing a major, and developing skills needed to succeed in college. These students were also more likely to believe that they would benefit from a break in schooling, more concerned with developing special occupational skills shortly after leaving high school, and more interested in military service (over 40 percent of the group that was willing to be contacted directly had expressed a positive interest in military service).

As a follow-on to the Sacramento study, Army recruiters for the three high schools involved were provided with selected CPP information for those students authorizing direct contact by Defense. Both recruiting officials and recruiters showed considerable interest in the information available on students through the CPP and its potential to generate useful leads and meaningful discussions with the individuals contacted. Recruiters rely heavily on phone contacts in reaching high school students, and often know very little about the student. This has placed the recruiter at a disadvantage in developing rapport and finding a common meeting ground for discussing Service programs. It is here that programs such as the CPP offered direct assistance to the recruiter.

Through the CPP, recruiters were being furnished with important information on a self-selected group--that is, students who had expressed interest in hearing about Defense programs. Since the information covered

each student's ability level, interest in military service, post-secondary school plans, occupational interests and goals, financial needs, and other important matters, the recruiter could be selective both in terms of the students to be contacted and the Service's programs to be described. By knowing the prospect better, the recruiter could not only feel more comfortable during initial and follow-on phone contacts, but could also tailor Service offerings to meet individual needs and objectives. The communication process between recruiters and high school students was being directly enhanced by the use of CPP data.

The Sacramento study also provided the first indications of the acceptability of DoD subsidization of the CPP to both schools and students, and under relatively adverse conditions. Arrangements were made by ACT for CPP administration very late in the school year. Although no testing time had been previously scheduled, Sacramento school officials at the district and school levels were sufficiently interested in the Defense/ACT approach to work CPF testing into very crowded school schedules. This led to difficult testing conditions, and some students did not take the testing seriously. Even so, less than 10 percent of the students tested felt that Defense subsidization of the CPP was inappropriate.

Findings from the Sacramento study have been considered sufficiently promising by Defense officials to warrant a large-scale pilot study with the CPP during the 1981-82 school year. The Army and Air Force have each agreed to sponsor separate CPP testing for 25,000 students, with testing results used exclusively by each Service. Also, OASD (MRA&L) is expected to sponsor testing for about 150,000 students with results used here on a joint-Service basis. High schools will be sought for CPP testing that show acceptable ability levels and low ASVAB participation rates, with ACT making the arrangements necessary for CPP administration and scoring.

Some changes in the CPP program will be required to make it more effective for Defense use. For example, the current CPP report provides more detailed information than is needed for recruiting purposes, and does not now include provisions for integrating results from the special twelve-item questionnaire in test reports. Recruiting use of CPP data would therefore be facilitated by the development of a special CPP record extract for this purpose, and one possible version of this extract record has been given to ACT for review. Service review and suggestions will be needed to assure that recruiter needs are fully taken into account.

Interactions between the Services and ACT are also needed to develop the individualized letters and other special materials required for students who choose to have ACT serve as an intermediary. The CPP unit costs to Defense of $4.50 for each student tested include the preparation, printing, and handling (except postage) of the mailout. The tailored materials will vary to some extent from those developed for ACT Assessment use (discussed later in the chapter), since the twelve-item CPP questionnaire provides information not available in the ACT Assessment record.

The large-scale studies planned with the CPP are required not only to determine the cost-effectiveness of supplementing the ASVAB with commercial testing but also to determine its impact on the current ASVAB program. The effect need not be negative. The CPP will probably be most effective when used to test high school juniors toward the end of the school year. Since the CPP and recruiter contacts are likely to increase awareness among students the educational and vocational opportunities available to them in military service, it is quite possible that more of these students than is now the case would take the ASVAB as seniors to determine their qualification for military programs.

The CPP program offers the possibility of other favorable outcomes. As part of the service ACT offers high schools in connection with the CPP, there is provision for a follow-up group meeting with students, parents, and high school counselors to help interpret student CPP results for guidance purposes. ACT intends to use this meeting to help increase the general awareness of Defense programs, and to show their potential value to students otherwise bound for college. This meeting would also be used as a mechanism for obtaining additional student releases of CPP information to Defense.

The DAT Program

The Psychological Corporation is preparing a major revision of the DAT for release during the 1982-83 school year and has proposed to Defense that a study be conducted to determine the potential for Defense subsidization. The Psychological Corporation is willing to modify its current testing procedure to include questions of interest to Defense for recruiting purposes, and would be expected to meet the same set of specifications developed between Defense and ACT for the CPP. Since the Psychological Corporation does not have a student search service program, a direct-mail capability would have to be developed for access to those students who are willing to be contacted only through the Psychological Corporation. It is expected that the inclusion of this part of the program would make the costs of about $4.50 per student, plus postage. The costs would be roughly comparable to those of the CPP.

There are many advantages to Defense if the DAT and CPP programs provided similar information on the students tested through each program. A common testing record extract for recruiting purposes should be possible for the two tests--and any other tests used in this program--so that recruiter usage is better facilitated. In this connection, and to increase the utility

of CPP and DAT information for recruiting purposes, it will probably be desirable to prepare a recruiter guide. At a later date, if the program warrants, it should be possible to include the use of commercial test results as a subject in the training curriculum at recruiting school.

It is expected that the DAT will be administered during the 1982-83 school year, but no conclusion has been reached concerning the grade level to be tested or the time of year in which testing should occur. Testing of juniors would be consistent with the CPP program and would take into account the Sacramento finding that juniors are more interested than seniors in being contacted directly by Defense. The alternative, senior testing in the fall, would probably provide more definitive data for comparing the merits of a juniors/spring and seniors/fall high school testing program for recruiting purposes.

ACT Assessment Program

The ACT Assessment program for the 1981-82 school year will for the first time include a student release item specifically designed to take into account Defense educational and vocational programs. The student release questions read as follows:

Information about Educational Opportunities

Colleges and scholarship agencies sometimes ask ACT to inform you about educational programs and benefits they offer that seem to match your interests and needs. Also, some government agencies and employers offer educational and career training and benefits that may be of interest to you. ACT wants to help you find out about such programs and opportunities, but only according to your instructions.

190. Do you wish ACT to inform you about colleges with educational offerings that appear to match your interests?

Yes..... 1
No..... 2

191. Do you authorize ACT to send your ACT record to scholarship agencies so they may alert you to the financial aid opportunities they offer?

Yes..... 1
No..... 2

192. Do you wish ACT to inform you about other agencies, including the armed services, that offer educational and vocational training and benefits that appear to match your interests?

Yes..... 1
No..... 2

ACT Assessment is given five times each school year, with the first administration during October. Accordingly, the number of participants in ACT Assessment willing to be contacted by Defense would not be known until scoring was completed during December. It has been estimated, however, that over 200,000 male students (between 50 and 60 percent of those tested during the 1981-82 school year) would respond favorably, with a somewhat lower number and proportion of female students willing to be contacted. Many of these individuals would be on mailing lists available to Defense from other sources, and could therefore be expected to receive regular recruitment literature from each of the Services. Additionally, many other educational institutions and training organizations would also be taking advantage of the various listing sources available, including ACT's, to get information disseminated on their programs.

The amount of competing mail, the costs associated with the use of ACT Assessment search service and information, and the dictates of effective advertising would all lead to the conclusion that Defense use of ACT data must be directed to the proper audience, and that recruiting appeals must be made sufficiently sophisticated to catch the attention of that audience. Accurate targeting and skilled communication of Defense programs would both be necessary to make the use of ACT Assessment data cost-effective for recruitment purposes.

Identifying groups of individuals of special interest to Defense for recruitment purposes should be facilitated by the wide range of useful information in the ACT Assessment record. In addition to biographic, interest, and student planning information that is obtained from each student, aptitude and scholastic achievement scores would also be available, and these data could be used to identify high school students most likely to meet ability requirements for service entry. A sampling of some of the more potentially useful information available for targeting purposes and its application for a highly specific targeting purpose--for example, recruitment for language training--is shown in the two tables that follow.

The approach to help identify target groups for Defense recruitment would be to determine if information in ACT Assessment files can predict who will qualify for military service and who will actually enlist. This could lead to the development of both an AFQT score estimate (for preliminary screening, not selection purposes) and a "propensity to enlist" score. These scores, if sufficiently valid, would permit directing increased recruiting attention to the individuals most likely to be qualified for service and most likely to be responsibe to recruiting appeals.

A study was conducted of over 25,000 individuals who enlisted in military service after having taken the ACT during the 1976-77 school year. As expected, a number of ACT ability and achievement scores were found highly related to the AFQT scores obtained later by this group (multiple r in the 80s), and sufficient for screening purposes.

More specifically, the purpose of this study was to provide information on the characteristics of individuals who take ACT Assessment and subsequently enter military service. An investigation of this type would provide (1) base-line information on the number and quality of ACT test takers who enter

ACT/SAT TEST RECORD INFORMATION

- GENERAL ABILITY LEVEL
- OCCUPATIONAL CHOICES
  - ADMINISTRATIVE
  - MEDICAL
  - FOREIGN LANGUAGE
  - SERVICE
  - TRADES
- EDUCATIONAL GOALS
  - VOCATIONAL OR TECHNICAL PROGRAMS
  - TWO YEAR COLLEGE DEGREE
- HIGH SCHOOL BACKGROUND
  - CURRICULUM
  - ACHIEVEMENT
  - EXTRA CURRICULAR ACTIVITIES
    - -- Athletics
    - -- Community Service
- FINANCIAL STATUS
  - NEED FINANCIAL SUPPORT OR WORK IN ORDER TO ATTEND COLLEGE

ACT/SAT TEST RECORD INFORMATION FOR A SPECIFIC MILITARY RECRUITMENT PROGRAM:

MILITARY JOBS REQUIRING PROFICIENCY IN A FOREIGN LANGUAGE

- FOREIGN LANGUAGES STUDIED IN HIGH SCHOOL
  - NUMBER OF YEARS
  - ACADEMIC GRADES
- DESIRE FOR ADVANCED PLACEMENT IN FOREIGN LANGUAGES IN COLLEGE
- FOREIGN LANGUAGES SPOKEN AT HOME
- FOREIGN LANGUAGE OR LINGUISTICS AS COLLEGE MAJOR AND/OR OCCUPATIONAL GOAL
- NEED FOR FINANCIAL ASSISTANCE TO ATTEND COLLEGE
- DESIRE TO STUDY IN A FOREIGN COUNTRY DURING UNDERGRADUATE YEARS IN COLLEGE

service, (2) the relationship between ACT and AFQT scores, and (3) a determination of whether or not ACT data could be used to develop an "enlistment propensity score." Positive findings here would permit focusing on individuals most likely to be responsive to enlistment appeals.

Defense data bases for Service enlisted accessions during the period FY 1977-1980 were furnished to ACT to be matched against ACT Assessment data for individuals tested in the 1976-1977 school year. Analysis of the data showed that over 25,000 individuals taking the ACT had enlisted in military service, and about 5,000 of these were women. Since about 400,000 males had been tested by ACT in the 1976-77 school year, the 20,000 males entering service represented 5 percent of the males tested.

A statistical comparison of ability levels was made between males and females who enlisted and the total ACT Assessment population (see Table 34).

Table 34

Average Scores on Selected Variables for Individuals Taking the ACT Assessment During the 1976-77 School Year and Those Who Later Joined a Military Service

Variable	Service Entries Males (N=20591)		Service Entries Females (N=4847)		Total Entries (N=25438)		1976-77 College Bound Norms	
	$\bar{X}$	S	$\bar{X}$	S	$\bar{X}$	S	$\bar{X}$	S
ACT English	14.7	5.3	16.0	5.3	15.0	5.4	17.7	5.2
ACT Math	15.3	7.6	13.1	6.9	14.9	7.5	17.4	7.8
ACT Social Studies	15.7	7.5	14.8	7.0	15.5	7.4	17.3	7.3
ACT Natural Science	19.8	7.0	18.0	6.2	19.5	6.9	20.9	6.5
ACT Composite	16.5	6.0	15.6	5.5	16.3	5.9	18.4	5.9
AFQT	65.1	19.8						

The data indicate that service entrants who took the ACT were significantly lower in academic ability level than the full college-bound population tested with ACT. In respect to general military ability level, however, the male enlistees with a mean AFQT of 65.1 were well above average. Statistical analyses were also performed to determine the relationship between AFQT and ACT scores, and a multiple correlation coefficient of .8 was obtained.

Analysis was conducted to develop an "enlistment propensity score" using student self-report information obtained in the ACT record. Comparisons were made between male entrants to military service and male non-entrants for all ACT variables except aptitude scores. Differentiating variables were identified and each was given a unit weight in developing an enlistment propensity score. Sums of the score weights were then obtained for male service entrants and non-entrants, and, among the entrants, for those discharged prior to completion of initial tours of duty. The results, shown in Table 35 show a significant and usable difference between service entrants and non-entrants, and no significant difference between service entrants and those latter discharged prior to tour completion.

Table 35

Percentage Distribution of Enlistment Propensity Scores for Three Male Groups Taking the ACT: Non-entrants into Military Service, Service Entrants and Service Entrants Discharged Prior to Tour Completion

Enlistment Propensity Score	Non-Enlistees	Enlistees	Enlistees Discharge Prior to Tour Completion
23 and higher	4	12	13
20-22	12	21	22
17-19	21	27	26
14-16	25	21	18
11-13	19	9	9
10 and lower	19	10	12
Total	100%	100%	100%
Mean	14.2	16.6	16.7
Standard Deviation	5.9	7.8	6.5
Number	395,500	20,591	2,828

Effective communication of Defense programs to selected target groups will require some degree of individualization in the letters transmitted by ACT and possibly in the brochures prepared for this program. Tailoring specific appeals to the needs of the individual will be required to increase the probability that the letter and accompanying materials are read. To meet this objective, ACT has been willing to work closely with Defense representatives in developing a "personalized" computer-generated product that would be sent out by ACT. Individuals wishing to learn more about the Services' programs and willing to be contacted by a recruiter would mail back a prepared form to the Services.

ACT costs to Defense for developing and printing individualized letters for selected groups of students, and their transmittal along with Defense-prepared brochures, will be about 55¢ for each student contacted, in addition to postage costs. The following approach could be used to increase the effectiveness of DoD use of the ACT Assessment search service:

1. The Military Services identify skill requirements that are expected to be hard to fill. This could include not only highly technical military jobs but also non-technical skills such as combat arms.
2. ACT applies selection criteria provided by the Services to identify target groups within the tested population. These selection criteria could include ability level, enlistment propensity scores, educational and vocational interests, financial need information, and related data.
3. ACT mails out the Services/ACT-developed package appropriate for each target group.

4. The Services' recruiting agencies receive reply cards from interested students which are coded to identify the specific target groups involved. This permits the recruiter to contact an individual with full knowledge of relevant information in the ACT record.

Use of the ACT Assessment search service would provide potential access to a highly qualified population. Almost all those tested would be expected to become high school graduates, and the mean AFQT score for this group would be high (in the AFQT Category II range). It is not known at this time, of course, what proportion of students contacted through the ACT Assessment search service would be responsive to Defense appeals. This would probably vary considerably among the target groups and be highly related to the programs that Defense can offer. As a baseline indicator, about five percent of the male students tested through ACT Assessment enter military service within a three to four-year period. Predominantly high school graduates, their mean AFQT score is at the 65th percentile. The use of the ACT Assessment search service program for targeting purposes and for the generation of the personalized recruitment appeals would be expected to increase the number and perhaps even the quality of the ACT test takers who enlist in military service.

The SAT Program

The large number of qualified high school students taking the SAT each year would make this program of prime importance to Defense. Unfortunately, the College Board has not been willing to consider arrangements of the type that have now been made with ACT. It is believed that this reluctance has

developed from a concern on the part of the College Board that there would be an unrestricted use by military recruiters of SAT lists, and that this would prove offensive to some high school students and damage the search service program. Additionally, the College Board has been apprehensive about broadening the use of its files since it has been involved in litigation with a commercial listing company attempting to obtain a copy of the names and addresses contained in the SAT search service file.

The unwillingness of the College Board to enter into arrangements with Defense for use of SAT records could change in time. It would appear desirable, however, for Defense not to press the issue now, but to concern itself instead with making effective use of the ACT Assessment search service program. Demonstration of positive results through this program, including its acceptance to students, parents, and schools, should help persuade the College Board of the value of changing its current policy and allowing Defense access to SAT records.

Vocational Interest Measures

While the ASVAB offers reliable ability estimates for use in high school counseling, effective guidance procedures include measures of vocational interest as well. Although there are a number of commercial testing organizations which offer interest measures on a stand-alone basis for high school use, such as the well-known Kuder and Strong-Campbell inventories, the combination of interest and ability measures in a single battery by testing companies is becoming increasingly prevalent. Psychological Corporation's DAT and the ACT Career Planning Guidance battery all offer interest as well as ability test information on students to high school counselors.

The most promising option for a Defense interest measure that could be offered in conjunction with the ASVAB High School Testing Program appears to be the Vocational Interest-Career Examination (VOICE). This test was developed originally by the ETS to meet Air Force needs for an interest battery that would make up for the shortcomings of available commercial measures. Initially a test comprising 400 items, the VOICE has been reduced in one form to as few as 245 items requiring less than thirty minutes for administration. Eighteen factors have been identified which represent relatively independent dimensions of vocational, technical, and other interests, and which have implications both for civilian and military life. Validated against job satisfaction-dissatisfaction criteria for military personnel in many Air Force occupations, the VOICE represents one of the few interest measures that can show some degree of predictive validity. Equally important, the VOICE has already been standardized on a nationally-representative sample of high school students and norms are available for use for this population.

There is little question that the VOICE would be viewed by many high school counselors as a valuable addition to the DoD High School Testing Program. While it would appear to increase overall testing time, in actuality the VOICE would probably be self-administered during school study periods and turned in prior to or during ASVAB administration. Handed out by school counselors to students a few days before the ASVAB is adminstered, it would probably have the effect of increasing student interest in ASVAB participation in those schools where many students do not now take the test battery. For those students who would take the VOICE but continue to show little interest in taking the ASVAB, it could provide the basis for a recruiter contact that otherwise might not be made.

In respect to the logistics of VOICE administration, scoring, and reporting, less difficulties would be expected here than in an operational testing mode where results are used for selection purposes. VOICE forms and student identification cards would be provided through the mail to each school, or hand-delivered, and collection, scoring and reporting could parallel current ASVAB procedures. Reporting of results would be varied to cover three possible testing conditions: when ASVAB scores only are available, when VOICE scores only are available, and when ASVAB and VOICE scores are both available. Appropriate interpretive reports of test results for students and counselors would have to be developed for VOICE as a stand-alone and in combination with ASVAB. Rosters for recruiters would also be modified to include relevant VOICE information for both stand-alone and ASVAB-related testing conditions.

It is unlikely that many schools not currently participating in the ASVAB program would be moved to change their attitude if VOICE were offered in combination with ASVAB. The motivations for non-participation such as negative attitudes toward the ASVAB for civilian guidance use, the amount of testing time required, or concerns with military testing in the high school will probably not be modified to any great extent by offering the VOICE as an ASVAB supplement. It is in the schools where ASVAB student participation rates are low that some increase in test takers may be expected if the VOICE were introduced.

In addition to adding an interest inventory to the DoD High School Testing Program to improve its effectiveness for high school guidance purposes, it should be possible to improve the effectiveness of the battery for military recruitment purposes as well. This could be done by obtaining additional information on the student that could be used to determine enlistment

propensity and to identify the types of recruitment appeals which would be most useful. More complete information on postsecondary school plans, willingness to take a school break prior to college entry, need for financial assistance in attending college, and other relevant data could be added to the student record form now accomplished as part of the operational ASVAB process. This information could be used by recruiters to narrow down potential leads as well as to facilitate discussions between recruiters and students on Service programs that would meet individual needs.

The use of VOICE or the use of additional student information would need to be tested experimentally in an adequate sample of high schools prior to considering operational use of these possible initiatives.

Summary

Four commercial testing programs have been identified as having signficant potential to supplement the ASVAB in an expanded DoD High School Testing Program. Two testing programs are used for vocational guidance: the ACT organization's Career Planning Program (CPP) and Psychological Corporation's Differential Aptitude Test (DAT). The other two programs, ACT Assessment (ACT) and the Scholastic Aptitude Test (SAT) are for college placement.

The CPP and DAT are each administered for vocational guidance purposes to over 200,000 high school juniors and seniors each year. Growth of these programs has been held back largely by the lack of funding available to high schools to pay for vocational testing. Both ACT and the Psychological Corporation are highly interested in expanding their testing programs, and Defense subsidization of their testing costs is viewed as a desirable option.

These programs offer the following advantages over college placement tests in supplementing the ASVAB:

1. Vocational guidance tests are usually adminstered to all students at a given grade level, and therefore include students who are job-oriented as well as the college-bound.
2. The testing companies are willing to include the administration of special questions developed by Defense, and this provides a capability to identify students interested in military service and the types of military programs to which they are most likely to be responsive.
3. The use of student release items permits test records for interested students to be sent to Defense for recruiting purposes, as in the case of ASVAB.
4. Defense has the exclusive use of student test record information for recruiting purposes, or, if subsidization costs are shared, has joint use of the information.

The feasibility of Defense subsidization of vocational guidance tests for recruiting purposes was evaluated in a pilot test of the CPP in Sacramento, California high schools. The schools and students were favorably disposed to the program. Male juniors were the most responsive group tested, with over 35 percent of these students agreeable to direct contact by Defense and an additional 29 percent to indirect contact through ACT.

As a follow-on to the Sacramento study, Army recruiters for the three high schools involved were provided with extracts from CPP test records for students authorizing release of their records to Defense. The information

proved extremely useful since it provided ability level, interest in military service, and post-secondary school plans. It enabled recruiters to feel more assured during initial and follow-up phone contacts, and permitted them to tailor Army offerings to meet student needs and objectives.

Findings from the Sacramento study were considered sufficiently promising by Defense officials to warrant a large-scale pilot study with the CPP during the 1981-82 school year. The Army and Air Force have each agreed to sponsor separate testing for 25,000 students, with testing results used exclusively by each Service. Also, OASD (M,RA&L) is expected to sponsor testing for 150,000 students with results used on a joint-Service basis. High schools will be selected for CPP testing that are high in quality and low in ASVAB participation, with ACT making the arrangements necessary for CPP administration and scoring. CPP costs will be about $4.50 for each student tested, including the development of special extract records for recruiter use. Also included will be the direct mail costs for students contacted by mail (similar to the ACT Assessment program, but also excluding postage costs).

The DAT is undergoing a major revision and will be ready for release during the 1982-83 school year. The Psychological Corporation is expected to modify its current testing and reporting procedures to meet the same set of specifications developed between Defense and ACT for the CPP, and it is expected that costs for Defense subsidization of the DAT will parallel those for the CPP. The DAT will probably be tried out during the 1982-83 school year, but the grade level and time-of-year determinations are yet to be made.

ACT and SAT college placement data bases contain substantial information on individual students that is used by many post-secondary schools to recruit

students through direct mail solicitation. Both ACT and ETS offer student search services and charge user fees for this purpose. Defense has been a major user of these search services in contacting high school students by mail to recruit for officer training programs. Neither ACT nor the College Board (which controls the use of SAT data) have permitted Defense to use the search services for enlisted recruitment.

One of the organizations, ACT, has been willing to develop a program enabling Defense to use its student search service for enlisted recruitment purposes. For the 1981-82 school year, the ACT Assessment program includes a student release item permitting Defense to contact interested students concerning Defense educational and vocational programs for enlisted personnel. Through use of the extensive individual information in ACT records, Defense will be able to identify selectively high school students with special skills and needs and to send them personalized letters and recruitment materials on relevant Defense programs. The individualized direct mail approach would be carried out under ACT auspices.

To increase the effectiveness of this program for recruiting purposes, research was conducted linking Defense and ACT Assessment data bases. An enlisted propensity score was developed based on student self-report information in the ACT record, as well as an AFQT score estimate based upon ACT aptitude and achievement data. Use of these two scores permits focusing recruiting attention on students likely to be qualified for military services and responsive to Defense recruiting appeals.

ACT costs to Defense for developing and printing individualized letters for selected groups of students, and their transmittal along with Defense-prepared brochures, will be about 55¢ for each student contacted, in addition to postage costs. The program would probably include the following procedures:

1. ACT would apply selection criteria provided by the Services to identify separate target groups within the tested population. Selection criteria would include interest in Defense programs, ability level, educational and vocational interest, financial needs, enlistment propensity, and related data.
2. ACT would mail out the Services/ACT-developed package of materials appropriate for each target group.
3. The Services' recruiting agencies would receive reply cards from interested students that would be coded to identify specific characteristics of individuals in each of the target groups involved.

Use of the ACT Assessment search service in this manner will provide access to students in the upper-ability range, and tailoring specific recruiting appeals to students' needs should increase significantly the number of enlistments currently obtained from this group. Although Defense makes extensive use of direct mail advertising for recruiting purposes, the individualized program identified here should be far more cost-effective in developing productive levels.

Chapter 5

CONCLUSIONS AND RECOMMENDATIONS

The number of schools and students tested in the DoD High School Testing Program has declined since the program reached its peak in school year 1974-75. A combination of internal policy changes and external criticism of the program largely explains the decline. Among the internal changes were a deemphasis on DoD efforts to promote "mandatory" testing in general and a deemphasis, in particular, on promotion of testing among freshmen and sophomores. Also, during this period, outside professional criticism of the usefulness of ASVAB for civilian counseling was accepted by a minority of school counselors.1/

In spite of the decline in number of schools and students tested, the ASVAB is by far the most widely used high school career guidance test, particularly among seniors. In a survey of schools conducted in 1979, seven out of ten schools reported that they administered the ASVAB in some grade and 63 percent reported that they administered the ASVAB to seniors. The ASVAB is well established as a "trade name" among counselors and other schools officials. About 59 percent of counselors and 40 percent of school officials rated the program as "above average" and 32 percent of the counselors and 45 percent of school officials rated it "average."

The number of leads furnished to recruiters and the number of accessions from among those who took the high school test have held up well despite the decline in participation in the program. The impact on accessions of the

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[1]Nearly 12 percent of the counselors selected non-usefulness of the test for civilian counseling as the primary reason for discontinuance of testing.

decline in test takers was alleviated because the decline in test takers in the 1976-77 school year largely consisted of freshmen and sophomores whose names and addresses were not furnished to recruiters. During this period over half of the decrease in seniors who took the test was offset by an increase in juniors. The cost per examination is estimated to be $2.00 and the cost per lead is estimated to be $2.92. Considering that the conversion rate of leads to enlistment is 1 enlistment for every 8 names supplied to recruiters, the program is considered to be cost effective.

The major purpose of the program is to assist recruiting operations by furnishing a list of contacts, prospects and leads. A secondary purpose is to provide the school with a test that is useful for civilian counseling, as well as for military counseling. The secondary purpose is defensible because it assists in marketing the test and, because of the low cost per examination, it does not involve substantial additional costs.

Most of the students who take the test do not do so because they are interested in military service. They take the test for some reason related more closely to the civilian counseling uses of the test. Nearly half of the test takers plan to continue their education in a 4 year college, a 2 year college, or a vocational technical school. Because of the tentative nature of occupational choice among students of high school age, many students who plan to continue their education or go to work as of the time they take the test, subsequently change their minds and enlist. Also, a large proportion of student test takers are simply undecided at the time they take the test; the undecided group is a relatively good source of accession prospects--second only to those who already plan to enter military service. For marketing purposes, it is desirable to continue to emphasize the usefulness of the

test for civilian counseling, as well as its use for entry into military service.

Among schools that discontinued ASVAB testing in school year 1979-80 dissatisfaction with internal school problems associated with administering the test was the most frequently mentioned reason for dropping the program. Problems included lack of space for test administration; difficulties in supervising test administration, including behavior of students; scheduling; and complaints of teachers concerning interference with daily routines. Most of the problems are not within the control of MEPCOM; however, the appointment in 1982 of MEPCOM representatives for the High School Testing Program in 17 AFEES is likely to assist the schools to alleviate some of the problems associated with test administration.

The High School Testing Program continue to be relatively favorably received in the South and Southeast and less favorably received in the Northeast and Midwest. The geographic variance is partly explained by the larger proportion of rural schools in the southern and southwestern areas of the country and the relative larger propensity of counselors in these areas to consider the ASVAB to be an acceptable instrument for civilian counseling. Other influencing factors are: the northeast area has the largest proportion of high schools with academic curricula and the southern area has the largest proportion with vocational curricula; there is less competition from other tests in the southern region; the Northeast has the largest requirement for minimum competency tests in high schools and the South has the lowest requirement; and there is a greater tendency by counselors in large urban schools in the northeastern and midwest regions to offer the ASVAB to those students who may be interested in military service. Although the proportion of students in the large urban centers of the Northeast and Midwest is

smaller than the proportion who take the test in southern high schools, the absolute number of test takers in the northeast region of the country is significant.

It is possible that the use of commercial tests to supplement the ASVAB, particularly in the Northeast and Midwest where ASVAB participation rates are low, may result in more leads to recruiters than can be furnished by the ASVAB program standing alone. Studies to date have established the feasibility of using the Career Planning Program of the American College Testing Organization and the Differential Aptitude Test of the Psychological Corporation to furnish names and addresses to recruiters, when the student gives his consent. In three Sacramento, California high schools, 27 percent of the students who participated in CPP testing were willing to have their records made available to recruiters and another 33 percent were willing to be contacted through ACT as an intermediary. The estimated unit cost is $4.50 per examination. A large-scale pilot test is needed to determine the cost-effectiveness of the use of commercal tests under operational conditions and the impact on the number of schools that administer the ASVAB and the number of students who participate. DoD currrently plans to administer such a pilot test during 1982.

Recommendations

1. The marketing approach to the High School Testing Program should be "tailored" at local levels because of the variations in motivations for testing in different geographic areas of the country. More students will be induced to take the test if the counselor has confidence in the use of the ASVAB for civilian counseling. But a significant number of schools will provide the test primarily to accommodate students who are interested (or who

counselors think should be interested) in military service. Generally, the schools that use the ASVAB as a military test have larger enrollments; the proportion of students who take the test may be relatively low compared to schools who use the test principally for civilian counseling but the absolute number of test takers may be nearly as high in schools that use the test chiefly for military counseling. For this reason the test cannot always be best marketed exclusively on the basis of its benefits to civilian counseling.

2. To enhance the usefulness of the test in civilian counseling, the administration of VOICE (a career guidance interest inventory developed by the Air Force) could be made available as a supplement to ASVAB where desired by the school. It is recommended that a feasibility test of the use of VOICE be conducted in the 1982-83 school year.

3. It is recommended that the expanded test of centralized MEPCOM marketing be conducted, as planned, in the 1981-82 school year. The organizational arrangement should evolve so that the MEPCOM representative become the focal point of staff responsibility for the High School Testing Program at field levels.

4. The proposed large-scale pilot tests by Defense of the CPP and DAT programs are needed to determine the cost-effectiveness of these programs under operational conditions in comparison with the cost-effectiveness of the present DoD High School Testing Program. The pilot tests should be carried out on a scale sufficient to permit accurate assessment of the impact of these programs on the marketing of the ASVAB in the DOD High School Testing Program and on recruitment. The pilot test should be concentrated in the northeast and midwest regions of the country and in schools where the ASVAB is not widely used.

5. The use by Defense of student information in college placement files is considered promising for recruiting college-bound youth for specific military programs. The willingness of the ACT organization to permit Defense to use its student search service for enlisted recruitment is a significant development, and Defense should consider providing financial support to take advantage of this new opportunity.

APPENDIX A

QUESTIONNAIRE FOR TELEPHONE SURVEY OF HIGH SCHOOL COUNSELORS ON ASVAB USE

QUESTIONNAIRE FOR TELEPHONE SURVEY

OF HIGH SCHOOL COUNSELORS ON ASVAB USE

1. Which of the following classifications applies to your school? (You may check more than one, if appropriate)

   [ ] Metropolitan [ ] Inner City

   [ ] Suburban [ ] Rural

2. Is your school's curriculum primarily academic or vocational?

   [ ] Academic [ ] Vocational

3. What is the enrollment in your high school during the fall semester?

   [ ] Under 500 [ ] 1,000 to 1,499

   [ ] 500 to 999 [ ] 1,500 or more

4. During which of the following school years has the ASVAB been administered at your school? (Please use school records if available to you)

   [ ] 1970/71 [ ] 1974/75 [ ] 1978/79

   [ ] 1971/72 [ ] 1975/76 [ ] 1979/80

   [ ] 1972/73 [ ] 1976/77 [ ] Complete records not available

   [ ] 1973/74 [ ] 1977/78

5. When the ASVAB was last administered at your school, which grades were included in the testing?

   [ ] 9th [ ] 10th [ ] 11th [ ] 12th

6. On what basis was the ASVAB administered to students in these grades?

   [ ] The test was required

   [ ] The test was offered on a strictly voluntary basis

   [ ] We recommended that only those students interested in military service take the test

   [ ] Other → Please describe _____

   _____

7. Why did your school elect to administer the ASVAB? (Mark all that apply)

[ ] A. To provide a basis for counseling students about college or their civilian job aptitudes

[ ] B. To provide a basis for counseling students about military service

[ ] C. To measure students' progress in school

[ ] D. So we can compare our students' scores with those of students in other schools

[ ] E. To take advantage of the free test service

[ ] F. To cooperate with the Military Services

[ ] G. Other → Please describe _____

Which of the above was your school's primary reason for administering the ASVAB?

[ ] A [ ] C [ ] E [ ] G

[ ] B [ ] D [ ] F

8. How were students informed about the ASVAB? (Check all that apply)

[ ] Through announcements over the public address system

[ ] The home room teachers notify the students

[ ] Through presentation by Military Service representatives

[ ] By distributing booklets and brochures provided by the military

[ ] By distributing an information sheet we prepared

9. Does your school plan to administer the ASVAB in the 1980/81 school year?

[ ] Yes

[ ] No → Has your school decided to completely discontinue use of the ASVAB?

[ ] Yes [ ] No [ ] Not sure

10. If your school has discontinued use of the ASVAB, please indicate which of the following factors lead to that action. (Check all that apply)

[ ] Not applicable, we have not discontinued use of the ASVAB.

[ ] A. Our experience with the test was unfavorable

[ ] B. The test is too long

[ ] C. Our school population consists almost entirely of college-bound students and we use other tests

[ ] D. The military representatives discouraged testing any group other than seniors

[ ] E. The test does not seem to be particularly useful for counseling about civilian jobs

[ ] F. Parents have objected to the use of a military-sponsored test

[ ] G. There was not sufficient student interest

[ ] H. Most of our students took the test last year and we have elected to skip a year

[ ] I. Adverse publicity about the test caused us to question its value.

[ ] J. Other → Please describe _____

_____

Which of the above was the primary reason for discontinuing use of the ASVAB? (Check one)

[ ] A	[ ] D	[ ] G	[ ] J
[ ] B	[ ] E	[ ] H	
[ ] C	[ ] F	[ ] I	

11. Which of the following tests are used in your school as a basis for student counseling? (Check all that apply)

[ ] Strong Vocational Interest Blank

[ ] Differential Aptitude Test

[ ] General Aptitude Test Battery

[ ]

[ ] Others → Please describe _____

_____

12. Using the following categories, please estimate the distribution of counseling time at your school.

Counseling for postsecondary education	_____ %
Counseling for disciplinary problems	_____ %
Post high school job counseling	_____ %
Other: _____	_____ %
Total	100%

APPENDIX B

QUESTIONNAIRE USED FOR SURVEY OF ARMY EDUCATION COORDINATORS

APPENDIX B

Questionnaire Used for Survey of Army Education Coordinators

QUESTIONS:

1. How is program going? That is:
    a. How many schools?
    b. > or <last year?
    c. Problem areas?
        (1) Type schools.
        (2) Staff.
        (3) Program limits (etc.).

2. How to get school cooperation?
    a. Individuals used?
    b. Who is contact?
    c. Type of pitch?

3. Why non-cooperation? What reasons given?

4. Is program worthwhile?
    a. Useful leads.
    b. Really attract new people.
    c. Cost efficient.
    d. Time efficient.
    e. Priority on his list recruiter duties.

5. The ASVAB itself:
    a. What does he think of test?
    b. What are its problems?
    c. Are problems test related to usefulness?
        (1) Lead development.

6. How is the program run in his area?

   a. Management procedures.

   b. Emphasis.

   c. Reward structure.

7. What could be done to improve program?

   a. Specialists.

   b. MEPCOM.

   c. Dollars.

   d. People.

   e. Administrative efficiency.

APPENDIX C

ACT Report to Students

PETERSON CHARLES P
APPLE LANE
WHEAT RIDGE CO 80033

392-11-0971
MALE
08/23/63

02/81
SENIOR
CAUCASIAN/WHITE

CAREER CLUSTERS

ACT CAREER PLANNING PROGRAM

STUDENT REPORT

SAMPLE EDUCATIONAL PROGRAMS
Child Care
Home Economics
Physical Education & Recreation
Police Science
Teaching

SOCIAL SERVICE INTERESTS	MED
SOCIAL SERVICE EXPERIENCES	FEW
SOME IMPORTANT ABILITIES*	
LANGUAGE USAGE	MED
NUMERICAL SKILLS	HIGH

SAMPLE EDUCATIONAL PROGRAMS
Agriculture Business
Business Administration
Finance & Credit
Hotel, Restaurant Management
Sales & Retailing

BUSINESS CONTACT INTERESTS	HIGH
BUSINESS DETAIL EXPERIENCES	SOME
SOME IMPORTANT ABILITIES*	
LANGUAGE USAGE	MED
NUMERICAL SKILLS	HIGH
CLERICAL SKILLS	MED

SAMPLE EDUCATIONAL PROGRAMS
Accounting
Data Processing
Office Machine Operation
Office Management
Secretarial Science

BUSINESS DETAIL INTERESTS	HIGH
BUSINESS DETAIL EXPERIENCES	SOME
SOME IMPORTANT ABILITIES*	
NUMERICAL SKILLS	HIGH
CLERICAL SKILLS	MED
LANGUAGE USAGE	MED

SAMPLE EDUCATIONAL PROGRAMS
Appliance, Auto, Office Repair
Carpentry
Farming
Food Service
Welding

SCIENCE INTERESTS	LOW
SCIENCE EXPERIENCES	SOME
SOME IMPORTANT ABILITIES*	
MECHANICAL REASONING	LOW
NUMERICAL SKILLS	HIGH
SPACE RELATIONS	LOW

9. YOUR CAREER PLANS

YOUR EDUCATIONAL PROGRAM PREFERENCES	CAREER CLUSTER NUMBER
1st ACCOUNTING	2
2nd CIVIL ENGINEERING TECH	4
YOUR LONG-TIME CAREER GOAL	
BUSINESS ADMINISTRATION	1

SOME CAREER SUGGESTIONS

YOUR INTERESTS SUGGEST YOU MAY LIKE TO WORK MOSTLY WITH DATA & PERHAPS PEOPLE. JOBS IN REGION 03 (SEE WORLD-OF-WORK MAP ON BACK) OFTEN INVOLVE THESE KINDS OF WORK ACTIVITIES.

SAMPLE EDUCATIONAL PROGRAMS
Art Education
Art & Photography
English & Literature
Interior Decorating
Journalism

CREATIVE ARTS INTERESTS	LOW
CREATIVE ARTS EXPERIENCES	NONE
SOME IMPORTANT ABILITIES*	

Consider your ability to express thoughts or feelings in writing or another way, and your special skills or talent in art, music, writing, etc.

SAMPLE EDUCATIONAL PROGRAMS
Computer Programming
Engineering (Aero. Elec. Mech., etc.)
Engineering Technical (3 years)
Mechanical Drawing
Pilot Training

TECHNOLOGY INTERESTS	LOW
TECHNOLOGY EXPERIENCES	FEW
SOME IMPORTANT ABILITIES*	
MECHANICAL REASONING	LOW
NUMERICAL SKILLS	HIGH
SPACE RELATIONS	LOW

SAMPLE EDUCATIONAL PROGRAMS
Dental Assistant
Medical Technology (Lab Work)
Nursing
Physical Therapy & Occupational Therapy
X-Ray Technology

HEALTH INTERESTS	MED
HEALTH EXPERIENCES	[illegible]
SOME IMPORTANT ABILITIES*	
NUMERICAL SKILLS	HIGH
MECHANICAL REASONING	LOW

SAMPLE EDUCATIONAL PROGRAMS
Biological Sciences
Law School
Math
Physical Sci. (Chem., Physics, etc.)
Social Sci. (Soc. Work, Psych., Econ.)

SCIENCE INTERESTS	LOW
SCIENCE EXPERIENCES	FEW
SOME IMPORTANT ABILITIES*	
[illegible]	HIGH
LANGUAGE USAGE	MED
MECHANICAL REASONING	LOW

*NOTE: Reading is an important ability in each Career Cluster.

PLANNED ENTRANCE DATE	FIRST TIME STUDENT?	HAS HS DIPLOMA?	WORK PLANS (hours/week)	LAST SCHOOL ATTENDED
SEPT 1981	YES	MAY	16-20	WHEAT RIDGE HS 364-892 WHEAT RIDGE CO 80033

HS PLANS & BACKGROUND

LONG RANGE EDUCATIONAL PLANS: 2 YEAR DEGREE

STUDENT ASSESSED FOR HELP WITH: * * ** *

HIGH SCHOOL GRADES: B A B C B

ABOUT YOUR INTERESTS, EXPERIENCES, & ABILITIES

Your interests, experiences, and abilities can help you discover which parts of the world of work you may want to explore further. As you explore, be sure to consider all the things you know about yourself, in addition to your test results.

- **INTERESTS & EXPERIENCES** - Your interest scores summarize your likes and dislikes for a variety of work-related activities. Your experiences in each area are summarized by the words: NONE, FEW, SOME, and MANY. Your interest and experience scores are compared to those of other students of your sex.

  Look at your interest and experience scores in each Career Cluster. Your interests may change as a result of your experiences. Have you tried some work-related activities in areas where your interests are high? Remember, high interests do not always mean you have the abilities needed to be successful in that area.

- **ABILITIES** - Your scores give you an estimate of your abilities as compared to those of a nationwide group of beginning students (men and women) in technical and community colleges.

  Look at each Career Cluster to see how you stand on the abilities that are often important for success in jobs in that cluster. Do you have the abilities needed for jobs in the clusters you are considering? Abilities can sometimes be improved with the right kind of study or practice. Talk with your counselor about this.

Your *Planning* booklet can help you explore jobs that interest you. It also includes a more complete description of the interests, experiences, and abilities measured by the CPP.

EXPERIENCES RELATED TO INTERESTS	INTERESTS	SEX SAME GRADE (1-9)
SOME	BUSINESS CONTACT	7
SOME	BUSINESS DETAIL	8
SOME	TRADES	2
FEW	TECHNOLOGY	3
FEW	SCIENCE	3
	HEALTH	4
NONE	CREATIVE ARTS	1
FEW	SOCIAL SERVICE	5

ADDITIONAL HIGHER STANDARD	ABILITIES	SEX SAME GRADE
2	MECHANICAL REASONING	3
6	NUMERICAL SKILLS	7
3	SPACE RELATIONS	3
4	READING SKILLS	4
6	LANGUAGE USAGE	5
6	CLERICAL SKILLS	6

SEE BELOW

INSTITUTIONAL CHOICE

ARAPAHOE CMTY COL
LITTLETON CO

Score Bands: The "XX" in the chart shows how your scores compare to those of the nationwide group. Bands are used because tests are not exact measures. Often two bands do not overlap, which means you probably will score higher than the other.

If an X means you did not answer enough questions.

Placement Information: If your English or math scores are low, ask your counselor about how you can improve these skills.

ACT Composite Range: The percentages tell you how you would do if you took the ACT. Most students score between the 17th and 71st percentiles.

PLACEMENT INFORMATION

BASIC SKILLS	ASSESS HELP?	SCORING DB
STUDY SKILLS	no	LOCAL
READING SKILLS		NORMS
ENGLISH COMPOSITION	+	6
MATH COMPOSITION		7
ESTIMATED ACT COMPOSITE RANGE		15 19
PERCENTILE RANK		

STANDARD SCORES: Scores are reported for each scale in standard units. Standard scores have been transformed to have a mean of 50 and a standard deviation of 10 for a specific group of students used to develop the norms. Most scores fall between 30 and 70. Standard scores of 40 to 60 are within the average range for students in the norms group.

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START HERE: U 'G YOUR CPP
REF .T

FINDING OUT ABOUT JOBS RELATED TO YOUR INTERESTS, EXPERIENCES, AND ABILITIES

Check (✓) each step as you finish it.

☐ 1. **Look over the 8 Career Clusters to your left.** They help to classify most of the occupations people enter. This report shows your scores on the interest, experience, and ability measures related to jobs in each cluster.

☐ 2. **Find the Career Clusters with your highest interest and experience scores.** Circle the scores. Interests are reported as LOW, MED, or HIGH; experiences as NONE, FEW, SOME, or MANY.

☐ 3. **Next find the Career Clusters with your highest ability scores.** Circle the scores. Abilities are reported as LOW, MED, or HIGH.

☐ 4. **Look over the 8 Career Clusters again.** Notice where you have made your circles. Circle the 2 or 3 clusters you want to explore further and list them below.

CAREER CLUSTERS TO EXPLORE

Number	Career Cluster Name
1	BUSINESS SALES
2	BUSINESS OPERATIONS
4	TECHNOLOGIES

☐ 5. **Look at box 9 in the middle of the Career Clusters.** Find the cluster numbers for your Educational Program Preferences and Long-Term Career Goal. Add the names and numbers of any new clusters to your list above. Now turn to the Job Family Charts in Section 8 of *Planning* to find out which jobs are included in the clusters you listed in step 4.

GO TO STEP 5a

143

ANOTHER WAY TO EXPLORE CAREERS

LOOKING AT JOB ACTIVITIES IN THE WORLD OF WORK

Check (✓) each step as you finish it.

☐ 6a. **Look over the World-of-Work Map at the right.** Groups of jobs have been combined into Job Families and placed on the map to show how much they involve combinations of four basic work activities: working with DATA, IDEAS, PEOPLE, or THINGS. While jobs usually involve some work of each type, *most jobs stress only one or two of these work activities.*

Working with	Examples of workers
DATA (facts/records)	Clerks & accountants
IDEAS (theories/insights)	Writers & scientists
PEOPLE (care/services)	Salespersons & teachers
THINGS (machines/materials)	Mechanics & technicians

☐ 6b. **On the edges of the map, circle the one or two work activities you think you most prefer** (working with DATA, IDEAS, PEOPLE, or THINGS). Look at the Job Families near those work activities to see if any of them interest you.

☐ 7a. **Now read over the message in the bottom part of box 9 on the front of your report.** From your message, write in the missing words in the statement below. (If your region is 99, go to step 7b.)

YOUR INTERESTS SUGGEST YOU MAY LIKE TO WORK MOSTLY WITH DATA & PERHAPS PEOPLE.

JOBS IN REGION 03 ON THE WORLD-OF-WORK MAP OFTEN INVOLVE THESE KINDS OF WORK ACTIVITIES.

☐ 7b. **Look over the Job Families in your region and the regions nearby.** Circle the Job Families you want to explore further and write their names below.

JOB FAMILIES TO EXPLORE

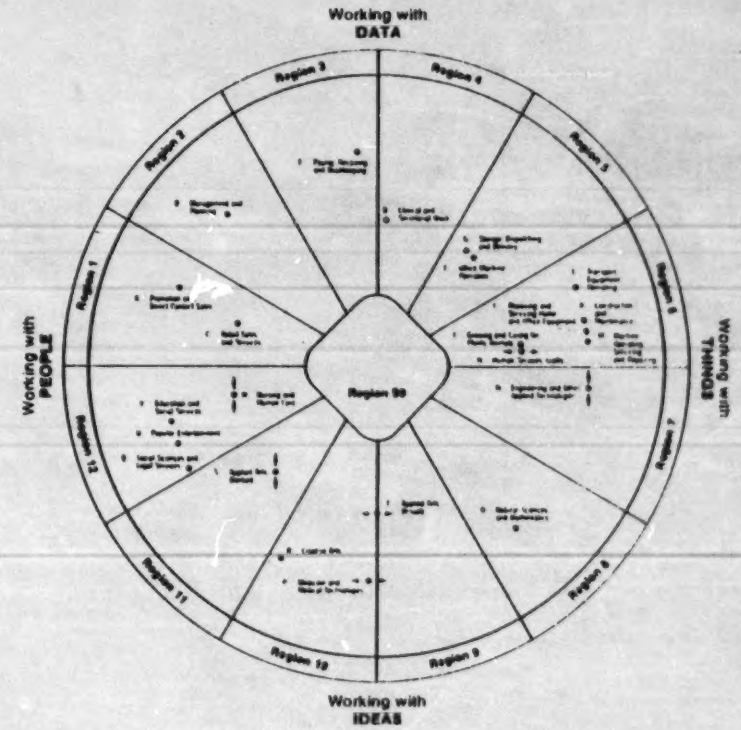
Letter	Job Family Name
E	PAYING & ACCOUNTING
B	MANAGEMENT & PLANNING
A	PROMOTION & SALES
N	ENGINEERING
F	OFFICE MACHINE OPERATION

☐ 8. **Now turn to the Job Family Charts in Section 8 of *Planning*** to find out which jobs are included in the Job Families you listed in step 7b. Use the ideas in *Planning* to find out more about jobs and careers that interest you.

WORLD-OF-WORK MAP

The World-of-Work Map shows how much each of 25 Job Families involves working with DATA, IDEAS, PEOPLE, and THINGS. Although not shown on the map, Job Families X. *Personal and Household Services* and Y. *Law Enforcement and Protective Services* tend to fall in the inner sections of regions 2 through 5.

You'll find the names of jobs and careers in each of the Job Families in Section 8 of your *Planning* booklet.



Most jobs in a family have similar work activities and fall near the Job Family point. However, jobs in some families are more varied in their work activities. Arrows (↔) by a Job Family show that work activities in some jobs in that family often involve working with PEOPLE while others involve working more with THINGS. For other Job Families, the arrows (↕) show that some jobs in that family involve working with DATA and others in that family involve working more with IDEAS.

111

APPENDIX D

Pilot Test of the ACT Career Planning Program (CPP) in Sacramento, California High Schools for Defense Recruiting Purposes

Pilot Test of the ACT Career Planning Program (CPP) in Sacramento, California High Schools for Defense Recruiting Purposes

The ACT organization was asked to conduct a pilot study in Sacramento, California high schools to give a preliminary indication of whether or not Defense subsidization of the CPP was feasible. There were many important questions to be answered, including the receptivity of schools and students to Defense involvement in a commercial testing program and the willingness of students to permit Defense to have access to their test records.

Final arrangements between ACT and HumRRO for the pilot test occurred too late in the 1980-81 school year for an orderly scheduling of CPP testing, and testing was accomplished under suboptimal conditions during May, 1981. ACT was solely responsible for the testing arrangements with the schools, with HumRRO assisting ACT in developing materials to explain Defense's involvement in the program and in developing special questionnaire items to be used to increase the value of the CPP for recruiting purposes.

Defense's interest and involvement in subsidizing CPP testing was fully explained to the students in a separate test booklet (Unit #10) of the CPP designed to include items of interest to CPP sponsors. Students were informed that Defense offered a broad variety of educational and vocational training programs and was funding the CPP administration so that students could be made better aware of these Defense programs. The twelve special questions developed for Defense recruiting purposes were then presented to the students, and included two critically important student release items. These gave a student the option of having ACT send the student's record to Defense for direct contact purposes, of allowing ACT send the student's record to Defense for

direct contact purposes, of allowing ACT to provide information through the mail on Defense's programs (indirect contact) or having no contact with Defense at all.

The CPP was administered to about 1,250 students in three Sacramento high schools and there were 1,160 students with complete test records for statistical analysis. Of these, 216 (27%) were willing to be contacted directly by Defense, 384 (33%) willing to be contacted indirectly, and 460 (40%) who wished no contact at all. The percentage distributions for questionnaire responses for students in two of the high schools are attached as Tab A. These tabulations showed differences in interests, needs, and plans among the students when grouped by sex and grade level. Interest in military service and willingness to be contacted directly by Defense were highest among male juniors. This finding suggests that by the end of the senior year male students have tended to firm up their post-secondary school plans, and, in doing so, a number of the seniors have moved away from consideration of military service as one possible option.

The students willing to be contacted directly by Defense had a higher degree of interest in each of the vocational areas covered by the CPP. While no significant differences were found regarding ability levels, the direct contact group indicated a greater need for help in going to college in respect to such concerns as financial assistance, finding employment, and developing skills needed to succeed in college. These students were also more likely to believe that they would benefit from a break in schooling, more concerned with developing special occupational skills shortly after leaving high school, and more interested in military service (over 40 percent of the group willing to be contacted directly expressed a positive interest in military service).

Individual CPP test records for students willing to be contacted by Defense were made available by ACT for recruiting purposes. It was apparent that the CPP test record provided more detailed information than could be used by a military recruiter in making initial contacts with students. Accordingly, an extract record was developed to include the most pertinent information from the CPP record and to include the student's responses to the 12-item Defense questionnaire. A number of telephone calls were made to some of the students to evaluate the extract record and to clear up inconsistencies in some of the information provided. The CPP extract record was then ready for release to Army recruiters in Sacramento for try-out purposes.

Army recruiters for the three Sacramento high schools were provided with student data from the CPP records furnished by ACT, and discussions were conducted on how the information could best be used for recruiting purposes. As anticipated, recruiters relied heavily on phone contacts in reaching high school students, and often knew very little about the student. This placed the recruiter at a disadvantage in knowing who to talk to, developing rapport, and finding a common meeting ground for discussing Service programs. The CPP data were useful in that information was provided on a self-selected group of students who were interested in hearing about Defense programs. Since the information covered each student's ability level, interest in military service, post-secondary school plans, occupational interests and goals, financial needs, and other important matters, this allowed a recruiter to be selective both in terms of the students to be contacted and the Service's programs to be described. By knowing the prospect better, the recruiter would be able to tailor Service offerings to meet individual needs and objectives. The communication process between recruiters and high school students would be directly enhanced by the use of CPP data.

This apparent potential of CPP information for recruiting purposes is being realized. Subsequent discussions with Army recruiting officials in Sacramento indicate that the use of CPP information has enabled recruiters to make many meaningful contacts with the students tested, and has led to a number of enlistments. A formal report is being prepared for USAREC by the Sacramento DRC.

Comparisons Among Sacramento, California, High School Students on the ACT CPP and Defense Questionnaire Items for Students Grouped by Willingness to be Contacted by Defense for Recruitment Purposes

MALE AND FEMALE JUNIORS AND SENIORS

CPP Interest and Aptitude Mean Stanine Scores

Interest Variable	Direct Contact (N = 316)	Indirect Contact (N = 384)	No Contact (N = 460)	Total Group (N = 1160)
Trades	5.4	5.1	4.9	5.1
Technologies	5.9	5.3	5.1	5.4
Sciences	5.5	4.7	4.6	4.9
Health	5.0	4.6	4.3	4.6
Arts	5.2	4.8	4.8	4.9
Social Service	5.0	4.7	4.5	4.7
Business Contact	5.5	4.9	4.7	5.0
Business Detail	4.9	4.6	4.2	4.5
Aptitude Variable				
Language Usage	5.5	5.6	5.8	5.7
Reading Skills	5.2	5.1	5.5	5.2
Clerical Skills	5.9	5.6	5.9	5.8
Numerical Skills	5.8	5.7	5.9	5.8
Mechanical Reasoning	4.7	4.7	4.8	4.7
Spatial Relations	5.4	5.3	5.4	5.4
ACT Composite Score (mean)	15.2	14.8	15.6	15.2

MALE AND FEMALE JUNIORS AND SENIORS

Background and Plans - Percentage Distributions and Percents of Total

Ethnic/Racial Background	Direct Contact	Indirect Contact	No Contact	Total Grou
Black	16.6	11.8	13.0	13.5
Indian	3.8	2.7	2.9	3.1
White	34.9	49.3	50.0	45.7
Mexican	14.0	9.7	8.8	10.5
Oriental	11.4	8.8	11.7	10.6
Puerto Rican	0.3	0.5	0.2	0.4
Other, No Responses	14.0	17.2	13.4	16.2
Total	100.0	100.0	100.0	100.0
Highest Level of Education Planning to Complete				
High School Diploma	8.0	6.4	8.2	7.6
Occasional Courses	5.8	4.3	5.1	5.1
Vocational/Certificates	8.4	12.0	12.4	11.2
Two Year College Degree	20.3	25.9	22.9	23.0
Four Year College Degree	36.0	35.8	34.9	35.6
Graduate Program	21.5	15.6	16.5	17.5
Total	100.0	100.0	100.0	100.0
Enrollment Plans				
Part-Time Student	32.7	37.7	27.6	32.5
Full-Time Student	67.3	62.3	72.4	67.5
Total	100.0	100.0	100.0	100.0

MALE AND FEMALE JUNIORS AND SENIORS

Background and Plans - Percentage Distributions and Percents of Total

Occupational Choice	Direct Contact	Indirect Contact	No Contact	Total Group
Social and Personal Services	11.4	11.1	11.3	11.4
Business Sales and Management	7.3	9.2	10.4	9.2
Business Operations	10.1	12.5	11.0	11.2
Trades, Crafts, Industries	18.3	16.8	17.9	17.8
Technologies	20.3	16.3	14.5	16.6
Natural and Social Sciences	7.8	7.1	5.3	6.5
Health Services/ Sciences	8.5	10.6	8.6	9.2
Creative and Applied Arts	16.3	16.4	21.0	18.1
Total	100.0	100.0	100.0	100.0
Plan to Attend Classes				
Day	91.0	86.6	88.7	88.7
Evening	9.0	13.4	11.3	11.3
Total	100.0	100.0	100.0	100.0
Year Expect to Enter Post Secondary Program				
1981	34.4	45.9	44.1	42.1
1982	51.4	41.8	43.4	44.9
1983	14.2	12.3	12.5	13.0
Total	100.0	100.0	100.0	100.0

MALE AND FEMALE JUNIORS AND SENIORS

Background and Plans - Percentage Distributions and Percents of Total

Hours Expect to Work Each Week During 1st Year in School	Direct Contact	Indirect Contact	No Contact	Total Gro
None	6.5	10.3	9.9	9.0
1-10	13.7	12.8	12.7	13.1
11-15	13.3	16.0	12.7	14.0
16-20	28.0	25.4	32.7	29.0
21-30	27.3	19.6	18.3	21.2
31 or more	11.2	15.9	13.7	13.7
Total	100.0	100.0	100.0	100.0
Need Help With Following Concerns While in College				
Financing Education	87.6	81.4	77.3	81.5
Finding Employment	80.7	68.9	65.5	70.8
Health Problem	6.2	5.5	5.0	5.5
Choosing a Major	64.8	59.6	52.0	57.9
Reading	51.7	40.7	35.5	41.6
Study Skills	62.6	56.0	48.2	55.1
Expression	66.8	53.1	50.2	55.7
Math	64.0	55.5	54.1	57.3

MALE AND FEMALE JUNIORS AND SENIORS

Defense Questionnaire Items - Percentage Distributions

Sureness of Educational Goals	Direct Contact	Indirect Contact	No Contact	Total Group
Very Sure	32.0	24.6	37.3	32.5
Fairly Sure	49.0	55.0	47.7	50.0
Not Sure	19.0	20.4	15.0	17.5
Total	100.0	100.0	100.0	100.0
Financial Support to Continue Education				
Finances No Problem	27.6	35.5	44.8	37.3
Need Financial Support	63.4	56.8	47.4	54.5
Not Going On - Financial	4.5	3.9	2.8	3.7
Not Going On - Other	4.5	3.8	5.0	4.5
Total	100.0	100.0	100.0	100.0
Benefit from Break in Schooling				
Yes	34.8	31.2	26.2	30.2
Undecided	35.8	42.7	35.6	37.3
No	28.1	25.0	34.7	30.2
Not Going On	1.3	1.1	3.5	2.3
Total	100.0	100.0	100.0	100.0
Chances of Finding Good Job after High School				
Very Good	32.6	29.2	36.2	33.3
Fair	57.8	57.3	56.6	57.2
Poor	9.6	13.5	7.2	9.5
Total	100.0	100.0	100.0	100.0

MALE AND FEMALE JUNIORS AND SENIORS

Defense Questionnaire Items - Percentage Distributions

Need to Improve Work Habits and Self-Discipline	Direct Contact	Indirect Contact	No Contact	Total Gro
Very Important	76.8	70.7	65.1	70.0
Somewhat Important	21.0	24.3	28.9	25.4
Not Important	2.2	5.0	6.0	4.6
Total	100.0	100.0	100.0	100.0
Need to Develop Special Occupational Skills Shortly After Leaving High School				
Very Important	47.5	44.0	28.9	38.5
Somewhat Important	40.4	42.5	40.8	41.1
Not Important	12.1	13.5	30.3	20.4
Total	100.0	100.0	100.0	100.0
Level of Interest in Joining Military Service				
Very Interested	17.2	8.3	2.0	8.3
Somewhat Interested	26.0	18.2	8.6	16.4
Uncertain	23.1	21.3	13.0	18.1
Somewhat Disinterested	17.5	20.6	12.4	15.9
Very Disinterested	16.2	31.6	64.0	41.3
Total	100.0	100.0	100.0	100.0
Attitude Toward DoD Subsidizing Testing Program				
Good Idea	74.2	60.0	36.9	53.9
Don't Care	22.5	34.3	49.5	37.4
Poor Idea	3.3	5.7	13.6	8.7
Total	100.0	100.0	100.0	100.0